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ABSTRACT

The primary purpose of this monograph is to describe how to develop and implement a career resource center, from conception to evaluation. Six brief vignettes are presented which focus on bringing career education into different types of schools. The purpose, goals, and functions of the career resource center are identified and related to the career development needs of students at different educational levels. The organization of an advisory committee, location and physical development of a center, materials and equipment, and an evaluation table by Career Resource Center Directors of equipment and materials are presented as practical considerations. Staffing and specific staff member responsibilities are outlined. The appendixes include Career Center Evaluation Forms for teachers and students, various floor plans for a career center, and an equipment and price list. (JS)

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The Career Resource Center

John Meerbach

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The Career Resource Center

John Meerbach

The confluence of the need for more effective career planning and the career education movement with the expansion of educational media has resulted in the career resource center as the heart of a viable career guidance program.

Chapter I

Development of the Career Resource Center Concept

Over the years, many guidance counselors have dabbled in the art of collecting, organizing, storing, and retrieving information that might be useful to the people who seek their help and counsel. Some counselors dabbled energetically, and the abundance of materials engendered by their interest in information overflowed in many instances into old storerooms, hallways, reception room alcoves, and other inconvenient places--a situation lending itself more to frustration than efficiency. But frustration is sometimes the catalyst for change, and the efforts of counselors around the country to solve their information delivery problems resulted in what is now called the career resource center.

Four factors stand out as key contributors to the recent emergence of the career resource center as an important facet of the school guidance program. First, concern is growing over the capacity of existing guidance programs to affect career planning and choice significantly and positively. Second, the emergence of career education as a vital thrust in education places new demands on guidance. Third, individualized instruction and other innovative educational techniques offer new ways of accomplishing old tasks that hold promise for use in guidance. Fourth, media and technology for use in the schools are increasing at a dramatic rate, impelled to a great extent by the career education movement.

Career Planning

The past decade produced volumes of research and criticism on the quality of education in this country and its influence on youth. Questions arose concerning the effectiveness of guidance practices for influencing young peoples' career planning and decision-making processes. Accurate, up-to-date, appropriate information on occupations, education, and personal-social assessment for students and teachers was recognized as vital to career planning and choice.

A study by Prediger, Roth, and Noeth (1973) established that junior and senior high youth desire more help in making career plans. Large numbers of students said that they are unable to secure the help they need and feel their guidance programs have been of little assistance in career planning efforts. In research based on the first 15 years of Project TALENT, Flanagan (1973a) reports that life planning is a central concern of students. An independent study by Fetters (1974) indicates that high school students graduating in 1972 considered values and concepts related to job selection to be "most important." Flanagan (1973b) found evidence of a trend toward greater stability of career choice among boys in 1970 than in 1960, and Fetters' study indicates that 85% of the seniors questioned felt that counselors, when approached, had the information needed. At best, the Flanagan and Fetters studies denote some improvement in the conditions supporting students' career decision-making efforts. On the other hand, Biggers' (1971) survey of students in grades 4-12 on use of information in vocational decision-making reveals high school seniors no more adept at using information than fourth graders.

Ginzberg (1971), in his penetrating analysis of guidance in the United States, underscores students' need to know about themselves and the world of work. He points out the role of reliable information about potential careers in facilitating this understanding. Ginzberg stresses the need for guidance specialists to use information as a tool to help clients "increase their awareness of their options, to demonstrate and encourage them to explore their alternatives, and to assist in interpreting the information to which they have access" (p. 187).

Support for improved guidance emanates at all levels from practitioner to legislative. The 6th Report of the National Advisory Council on Vocational Education, Counseling and Guidance: A Call for Change (1972), typifies the challenge voiced by numerous councils and commissions to guidance services in the schools and elsewhere. It calls for a substantial national effort to increase the effectiveness of guidance. Concern for the availability of career planning information recurs throughout recent guidance literature. The career resource center is an attempt to improve the quality and comprehensiveness of information available to students and to develop a more useful technique for disseminating career planning materials.

Career Education

Of all the forces abroad in education these days, career education has the greatest potential for influencing guidance programs and practices. Because career education concentrates on the transition problems of young people moving from school to work and beyond, the guidance function assumes a pivotal position in the master scheme. As Budke (1972) points out, the success of career education rests largely on the effectiveness of the career guidance program.

Hoyt et al.(1972) identify five basic components of career education: (1) classroom and learning activities, (2) acquisition of vocational job skills, (3) career development and career decision-making, (4) interaction with the community, and (5) development of home and family relationships. The career development of the child is the central focus of career education, and career development theory forms the foundation of the movement.

Career education is altering the role and function of the guidance counselor. It is bringing teachers and guidance counselors together in new relationships. Bell and Hoyt (1974) visualize the counselor, under certain conditions, assuming a supportive or consultative role. In addition to this closer teacher-counselor relationship, career education is requiring counselors to have increased interaction with paraprofessional employees, parents, and community resource people.

Cleary (1973) describes the counselor as "manager and coordinator of the resources available to the student for the planning process rather than the expert who 'sizes up' the student and makes recommendations for career choice" (p. 52). The resources cited by Cleary indicate the need in a career center not just for inanimate books and pamphlets but for live people and planned experiences as well. A career resource center is more than a room with materials and equipment for students to use. It is a place where persons interact and where community and school join to expedite the transition from education to work.

Educational Innovations

The career resource center is a particular form of learning or media center--an innovative concept springing from the interest in open education during the 1960's. Physically, the learning center is divided into given subject areas to facilitate student and teacher access to materials. Career education assumes the need to transmit a wide range of knowledge, understandings, and skills to students. A learning center provides not only a place to acquire learning but also a format for strengthening the instructional process.

Individualized instruction is one of the most promising techniques used in the career resource center, as most centers expect a high degree of individual student use. This form of instruction necessitates management systems that allow for proper record keeping and feedback, and for organization and sequencing of instructional objectives and goals.

Scanlon and Brown (1971) suggest five guidelines for developing individualized instructional modules: (1) design activities to permit student mastery of instructional content at individualized learning rates, (2) insure active student involvement in the learning process, (3) encourage self-directed and self-initiated activities, (4) encourage student evaluation of progress toward mastery, and (5) provide instructional materials and techniques based on individual needs and styles.

Individualized instruction must be based on specific objectives correlated with appropriate assessment instruments, curriculum materials, teaching techniques, and management skills. Not only does this mode of instruction represent a viable educational technique, but active participation by the student tends to reinforce many skills and attitudes related to self and decision-making processes.

Media and Technology

Recent technological improvements in media and communications are greatly influencing instructional practices. Publishers are flooding the educational field with audio-visual materials of increasingly high quality. Technology tends to vitalize and add variety to instruction through the introduction of films, film strips, tapes, interactive computer programs and other resources which can stimulate both teacher and learner. Heinrich (1971) points out that the use of media "makes teachers aware of instructional styles, characteristics, and shortcomings of which they may not have been conscious before" (p. 300).

Because of the media orientation of the resource center a wide range of instructional practices is possible, from individualized or self-initiated instruction to large group processes. Bruner (1966) has pointed out the importance of sequencing activities to correspond to the crucial phases of child development. Technological teaching, because of its structured nature, provides an ideal vehicle for sequencing knowledge and information in the area of career development. This capacity for sequential learning may offer the side benefit of increased instructional support, a topic worthy of further investigation by those committed to the implementation of career resource centers.

Although career education has encouraged wider use of community resources as a method of exposing the young to the realities of the world of work, simulation techniques will, in all likelihood, remain the prevailing mode of communicating an understanding of that world. As a result those persons most closely associated with the operation of a career resource center will, of necessity, become media specialists to the extent necessary to maximize the programs and services offered by their center.

Influenced by a concern for improving guidance programs and by mandates from local and state governments to provide career education, educators and counselors have evolved the career resource center. At first glance, the center may appear to be no more than another school room filled with equipment and materials. However, it is more than a room and, as with change from the known or the ordinary, its establishment will produce consequences. The decision to establish a career resource center in a school will require the commitment of time and energy and the involvement of a large number of people. The hidden dimension within the career resource center concept is what may be called the dynamic process. This process cannot be entirely described because it will vary with the environment of each center. What is implied is that a career resource center, put into operation today, may be an entirely different entity four years hence. It will change as the personnel who operate it and the materials within it change. The resource center will provide unlimited opportunities for growth and development on the part of students, counselors, teachers, and many others and, in turn, will acquire its own personality.

About the Monograph

The primary purpose of this monograph is to describe how to go about putting a career resource center together, from inception to evaluation. This first chapter has offered a brief review of several major factors that have been instrumental in the development of the career resource center concept. Chapter Two contains six vignettes, through which the reader will examine a few of the settings in which centers have emerged and explore some of the considerations fundamental to start-up. Chapter Three will focus on the goals, objectives and functions of a center.

The succeeding chapters will describe a number of specific areas such as advisory committees, facilities, evaluation and selection of materials and equipment, staffing the center and methods of evaluating the use of the facility. The final chapter is an attempt to probe into the future for a glimpse of the resource center of tomorrow. Plans, materials and equipment lists, and miscellaneous forms are included in the appendixes.

Six vignettes are presented in this chapter that suggest typical ways career resource centers come into being. The vignettes combine to translate the career center concept into real-life situations.

Chapter II

Six Vignettes

Urban High School

Big City's only public high school is Urban High. Constructed in the late 1920's, it is well maintained and has been expanded several times to keep pace with increasing enrollments. Once a four-year high school with 2500 students, Urban High is now a three-year school with 1500 students and a staff of 75, including five counselors. Urban High School has recently been evaluated by the Regional Accrediting Committee, and there are problems.

The evaluation report called attention to the high school's drop-out rate of nine per cent for each of the past two years. It cited the district's failure to react to obvious school and community changes, such as the decrease from 60% to 35% in the number of students going on to higher education and the substantial increase in the number of children from lower income families. The report noted that the curriculum has remained virtually unchanged for the past decade, and only 15% of the student body is presently involved in vocational programs of any kind.

In late October, immediately following receipt of the Accrediting Committee's report and recognizing the need for change, the school district launched a comprehensive needs assessment aided by State Department of Education funds. Students, teachers, counselors, administrators, parents, graduates, and a broad cross-section of the community participated in the survey, follow-up interviews, and meetings. In addition to generating an abundance of extremely useful data, the assessment stimulated intense community interest in the schools.

The district board of school directors commissioned a blue ribbon panel of Big City business, industry, and social leaders to analyze the results of the study and make recommendations. By mid-March the commission completed its task and submitted two major suggestions. First, the district must revise the total school curriculum, especially that of the high school, to respond more adequately to the needs of all students. Realizing that this first recommendation would require several years to implement, the commission recommended a second, shorter term, three-part goal of expanding the existing cooperative education and work-study programs, designating a school placement specialist, and increasing the emphasis on vocational guidance at Urban High.

The Urban guidance staff were prepared for the assignment. They had written two proposals: one requesting funds from the State Department of Education for a demonstration placement program to operate in cooperation with the state Civil Service; the second requesting federal funds to implement a career resource center. But locating such a center posed problems.

The cooperative education and work-study supervisors had been lobbying for offices closer to the guidance section of the building for some time, but no nearby rooms existed. Finally, with the principal, and with plans in hand, they conducted an inspection of the building. They sought a central location near a main entrance, where students could congregate without disturbing the entire student body. Finding that severely reduced student enrollment had resulted in a number of unused classrooms in different parts of the building, they persuaded some teachers to relocate to release the desired space. By removing some walls and redesigning the existing floor plan they were able to produce one large space for the offices and center. In no time at all, everyone was on the way to a busy summer of moving books, sorting materials, stocking shelves, and getting the resource center under way.

Central Vocational School

Construction of the new vocational school is proceeding exactly on schedule. Twelve months from now Central will offer a wide range of vocational programs to the students of ten surrounding school districts. A full-time comprehensive institution, able to house 1500 pupils, it will have just about everything--including a career resource center.

The Executive Director of Central sat in his office reflecting on what remained to be done. Planning the building was easy, but now he had to decide how to use the facility most effectively. The new staff members possessed valuable personal experience in the world of work, but some would need help in learning how to transmit their knowledge to the pupils. Preliminary surveys revealed student awareness and knowledge of occupations to be abysmally low throughout the area. The students needed counseling and informational resources. The Director saw the career resource center as a way to provide support services to the instructional staff and to offer students experiences beyond the realities of the shops.

Timberlost High School

Timberlost High School was built three decades ago when lumber was plentiful in Plain Valley and life was prosperous. Since then, the forests have become almost depleted and the busy little villages of the valley have turned into drab, dormant clusters of dilapidated shacks and trailers, with an occasional new ranch house planted starkly in a recently cleared field. Lumbering and the paper mill located half way to Rickety City are still the major sources of employment for the area, but they are steadily laying off employees. A nearby state forest and ski slope offer a few job opportunities in recreation and food service, but not enough to make much difference. Word has it that a developer plans a large year-round resort complex in the area, but plans are indefinite.

Most of the young people drop out of school early and leave the valley. Recently some of the established residents have given up the fight to hold their jobs and are also moving away. Overall, there is little to encourage people to stay in the area.

The lone counselor at Timberlost High School has long been aware of the problems facing the people of the region. Particularly disturbing to her is the knowledge that most of the people emigrating from the Valley experience considerable difficulty in securing jobs. The primary problems are a dearth of salable skills and job-seeking know-how, and a shallow understanding of the world of work. Mrs. Dawson knows something special is needed to remedy the situation.

While attending a guidance workshop, Mrs. Dawson participated in a session on career resource centers. She felt that such a center would greatly improve her ability to provide helpful experiences for the students if she could only find the space for it. Before leaving the conference, she collected all the handouts she could find and spoke briefly with the consultant about state project money. The guidelines permitted minor construction, but project costs had to be limited to $20,000--definitely not enough to finance an addition to the high school, let alone materials.

Driving up the narrow valley road toward home that evening, she found herself in a line of cars behind a high house trailer. When Mrs. Dawson was able to inch her way around the swaying vehicle she glanced up at it and saw a sign in the window: "For Sale." As she traveled farther down the road, the counselor thought, "Why not?" And the career resource center for Timberlost High School was born.

County Community College

Since its inception, County Community College has had a counseling center. At first the primary purpose of the center was to provide counseling and testing for persons seeking admission to the college. More recently the increased demand for information on occupations and other kinds of educational opportunities has changed the nature of the center's role. In addition, student enrollment has grown so much that the staff of two counselors and a receptionist is no longer entirely equal to the situation.

The counseling staff have long been aware of the special needs of students at the College. Most students hold part-time jobs and attend school as they can. Although large numbers enroll in technical programs, many young people still seem to be uncertain about their vocational goals. There is evidence that students lack decision-making skills and an adequate knowledge of themselves and of potential career opportunities. Adding another counselor did not seem to be the answer, and the counselors knew that some way must be found to channel these people to the information they need.

In an attempt to respond to this challenge, the counseling staff have started a small "honor" type self-service career resource center. On display are educational and occupational materials, organized for easy identification and use. Situated in the reception area of the counseling center, the resources are available at all times, with a volunteer aide on duty during peak hours to help students find what they are looking for.

The offer of a nearby educational laboratory to make County Community College a pilot field test site for a newly developed computerized career decision-making instructional program has been a tremendous boost to the program. Installed in a spare office, the terminals are in constant use and have stimulated activity within the resource center itself. Although they are still limited in space and materials, the counselors are excited about the student response and are making plans for expanding the facilities next year.

Hilltop High School

The cool spring evening closed refreshingly around guidance director Pete Johnson as he locked the front door of Hilltop High School. It had been a long, hot board meeting, and all he had to show for the evening was an ultimatum to do a better job of helping graduating students in their life planning. However, some of the sting was taken out of this directive by a guarantee of extra money to achieve this goal.

Mt. Zenith is the prestige district in the area. Over 1700 students attend Hilltop High, 80% of whom go on to college. Ever since the district was formed 60 years ago, the educational thrust has been directed toward college-bound students. However, the last few years have seen some changes in the students, and the number opting for college is decreasing. More Hilltop students are demanding information on a variety of post high school opportunities in addition to those requiring a college degree. Furthermore, follow-up studies show an increase in the number of those Hilltop students who enter college but never graduate. Feedback from such students indicates that they dropped out not because they were ill-equipped for college but because they were ill-informed about their chosen professions. Many, in fact, had serious misconceptions about the responsibilities, life styles, and other characteristics of the careers they had chosen. All of these facts point up the need for up-to-date information, not just on professional careers themselves, but also on the educational requirements for those careers.

Hilltop is well staffed with counselors, and the guidance department has long been proud of its ability to provide extensive individual counseling for all pupils. Nevertheless, the counselors have come to realize that the one-to-one approach is not always the most effective means of transmitting important educational and career information. And now the need for new and more detailed information has brought the problem into sharp focus.

At the guidance staff meeting the next day, the counselors realized they had to find a new approach to the problem. After listening to the report of the board meeting -- including the complaints aired by parents, the directive for action, and the offer of additional money to get results -- minds soon began to whir. It was obvious that a major part of the solution lay in strengthening the informational base with regard to educational opportunities and career planning. In addition, delivery and accessibility of information had to be improved.

One parent had suggested that the entire guidance staff be given two extra weeks of summer employment and a travel allowance. The purpose would be threefold: 1) to visit colleges and really get to know the admissions counselors and each school's programs; 2) to investigate other kinds of post high school opportunities, such as specialized training schools and technical programs; and 3) explore possible sources of information of a wide variety of professional and non-professional careers. This idea seemed to have a great deal of merit since it would add substantially to the counselors' knowledge. However, such a procedure would be of little help unless some method for conveying this information to the student was devised.

At this point, someone recalled reading about a commercially developed computer system that was capable of delivering detailed information about 1000 colleges and other training programs as well as a number of careers. Such a device might spark student interest and attention and relieve the counselors of the tedious task of trying to recall (or research) all the details themselves.

Before long these ideas were welded into a scheme of computerized information retrieval, supplemented by college and vocational school catalogues, career briefs and other printed resources, and individual counseling--all located in one large career resource center.

Dogwood High School

Dogwood District is like hundreds of suburban school districts filling gaps between large urban centers across the country--a stable district, but one beginning to experience change. Besides a high school of 1500 students, the district includes a middle school and four elementary buildings. All of the schools are fairly new, modernly equipped, and well staffed.

District enrollment peaked two years ago at 1600 pupils and has decreased slightly each year since. The number of new housing starts has dropped noticeably, and new construction consists largely of apartment and condominium-type dwellings. Most new residents are retirees or lower-middle income families. As a result, attitudes and mores in Dogwood are changing.

On the academic front, the number of students opting for college after graduation is on a downward trend, with two-year institutions and technical programs becoming increasingly attractive alternatives. The group of pupils leaving Dogwood for the area vocational-technical school has grown each of the last two years until this term not everyone could be placed. Parents and students are requesting more and better counseling and guidance in the schools to accompany this greater interest in the vocational aspects of life.

Dogwood faculty members are a solid group, aware of new happenings in education. They have heard of career education, and to a fair portion of them it makes sense. In fact, several teachers from each building in the system have attended workshops on career education and try to incorporate career-related activities in their classrooms. As a consequence, demands are burgeoning for resource people, career information and materials, help in understanding career development, values clarification and decision-making units, and related kinds of resources. Everyone sees the need to organize these diverse activities into a structured program.

The Curriculum Articulation Committee undertook the task of designing a K-12 career education plan for the district. Although implementation of this instructional sequence was to be voluntary at the beginning, the long range goal was total staff involvement. In the meantime, teachers already engaged in career education activities badly needed logistical support. The Committee suggested establishing a career resource center at the high school to house the microfilm reader-printer, used with the statewide VIEW occupational information system, and the computer terminal scheduled for installation next year. The high school counselors offered to develop a list of resource people and to act as group process leaders and consultants to teachers on career development activities.

The middle school counselors, however, felt that they also deserved a resource center. Since middle school students are in the critical exploratory stage of their career development, they said, a wide range of interesting career materials should be available to them. The elementary teachers voiced the opinion that their pupils' awareness needs were just as important as the needs of older students. Seeing that the situation appeared to be getting out of hand, the superintendent suggested that representatives from the counseling staffs of the three school levels, together with the maintenance supervisor, inspect all buildings in the district to determine what possibilities existed. The group was also scheduled to visit nearby schools where centers were operating.

Many hours of evaluation and planning culminated in a decision to establish a major center at the middle school, with smaller centers in other locations. It was believed that pupils at that level would make more extensive use of audio-visual simulation materials than would high school or elementary students. Also, there was room for the district media production laboratory to occupy the area immediately adjacent to the resource center. Thus, displays, traveling exhibits, and materials packages produced for circulation to schools throughout the district would be more readily available for use in the center. The smaller high school center would rely primarily on the two retrieval systems and basic references, with supplemental items supplied through a messenger service from the middle school. To meet the needs of the elementary students more effectively, information packets and materials services would be secured from the local educational service unit, and mini-centers would be implemented at each school in subsequent years.

A group of counselors, teachers, students, and parents formed a permanent Advisory Committee to evaluate career materials. The Committee not only judged those materials presently on hand but also made two trips to the state-run demonstration career resource center where they examined and priced the latest publications and equipment. Fortified with these data, the Committee presented the superintendent with a three-year budget for establishing the middle school and high school centers and satellite centers at each elementary building. Career education was on its way in Dogwood.

Summary

These six vignettes have provided a glimpse of just a few of the ways a career resource center might get underway.

The location, the size, the amount of materials, the kinds of resources available to students are as varied as are the institutional settings and the people who organize and implement them. One can get some idea of the dimensions of the task of starting, equipping and staffing a center from these short histories. The next chapter treats some of the concerns associated with the effective implementation of career resource centers.

In this chapter the purpose, goals, and functions of the career resource center are identified and related to the career development needs of students at different educational levels.

Chapter III

Objectives, Functions and Settings of the Career Resource Center

Determining the Need for a Center

The surge of interest in career resource centers as part of the response to the demands for career education is not without its dangers. The temptation of having a room where all guidance- and career-related materials may be collected and displayed for student use is most alluring. If, however, the center is to meet the career development needs of students, parents, teachers, and the community, it will be necessary first to determine what these needs are, what can be done to meet them, and how best to accomplish this task.

The variety of circumstances from which a career resource center can emerge is legion. The push to develop such a facility may come from within the school or from the community. One of three groups of people is likely to provide the impetus for action that may lead to the establishment of a center: students and parents, school staff, or the community.

Needs of students and parents may center on communication with each other and the school, or on awareness and exploration of career opportunities. Needs for career planning, preparation and placement assistance, and for an occupational and educational information base may also exist. Special programs and facilities may be required. At the same time, people of the community may need skill-training or renewing kinds of educational experiences. Community demands for involvement in the educational process are increasing and are necessitating greater willingness on the part of the school to utilize the contributions of lay individuals and groups. Career-related needs of all segments of society are inextricably related (Meyer, 1972). To respond to these concerns, the school requires that teachers, administrators, and counselors be cognizant of and trained in career development practices.

Needs Assessment

To meet the needs stated above, a school must determine how well its career development program is functioning. Knowledge of the discrepancies between current practice and an ideal program must then be translated into measurable goals and objectives. If the career resource center is to be a viable aspect of the guidance program, its functions must be predicted on specifically identified concerns.

Jones et al.(1974) describe a model for determining the career development and guidance needs of youth. The planning segment of this paradigm identifies guidance program philosophy, purposes, and target groups; assesses current program effectiveness; and proposes outcomes desired of a restructured system. Ascertained needs are translated into goal statements and performance objectives. The second phase of the model assigns priorities to goals and objectives and selects resources, materials, and activities appropriate to meeting those objectives. It is at this point in the assessment process that the career resource center may emerge as a necessary component of a career guidance program. A well-executed needs assessment related to a school's guidance services will reveal many of the goals integral to a career center, and the procedure can be pursued further to define more detailed center objectives and functions.

Goals and Objectives

Dittenhafer and Lewis (1973) state that the purpose of a career resource center is to provide career information to students, staff, parents, and others. The information must be current, accurate, and easily understood. To discharge this responsibility, the center should determine the information needs of its clientele and provide a range of materials to meet them.

Dittenhafer and Lewis identify these objectives as inherent in any center's operation:

> To collect, evaluate, and disseminate accurate and relevant career information.
>
> To provide assistance to the center's clientele in locating, evaluating, and using career information.
>
> To help students integrate self-knowledge with relevant career information by providing counseling services.
>
> To assist the faculty in integrating information into their instructional activities to support students' career development.
>
> To assist parents in becoming active, concerned, understanding participants in the career development of their children.
>
> To utilize community resources in fostering a better understanding of the relationship of education to work.

These objectives include all three groups identified earlier: students and parents, teachers, the community. They speak directly to the career development needs of everyone who might become involved with a career resource center and to the importance of the information dissemination function in the career education process. From these objectives spring specific functions necessary to the resource center.

Career Resource Center Functions

Career resource centers are not built in a day; conditions seldom permit all elements of a center's program to be implemented simultaneously. This may be just as well, since experience and time have a way of altering perspectives. The nine functions presented here do not include all possibilities. Some of these functions may be more appropriate in one setting than in another. But each of the nine functions relates to a specific aspect of career planning and to special groups within the school or community.

1. Collection, analysis, and storage of career information and materials.
   Occupational and educational information pertinent to local, state, and national conditions is essential to career planning, as are personal/social materials. A vital function of the center is to collect and evaluate all available information and materials and provide adequate storage for them.
2. Retrieval and dissemination of career information and materials.
   The need to connect information users with the information they need requires the development of efficient retrieval and dissemination techniques. If materials are to be used outside the center, methods must be devised to convey them to other settings.
3. Counseling and personal assessment.
   The resource center is considered an adjunct of the guidance program, the core of which is individual, group, and peer counseling. Counseling in career planning is normally directed toward interpretation of information about self and occupations, career decisions, and related personal/social problems. Assessment is an integral part of the counseling process.

4. Placement Service.

Increasingly educators are recognizing the need to bring the placement function into the school. Placement services include helping youth find part- or full-time employment and expediting the movement of students within the educational structure.

5. Work-study coordination.

The career resource center is an appropriate and logical place to house the school district work-study coordinator or cooperative education supervisor. The proximity of counseling and placement services, as well as the ready information base, make it an ideal situation for this person.

6. Curriculum development.

With the materials and information available, a center might well direct its resources toward developing a career-relevant curriculum. This would include generating specific instructional modules and teaching packets. A major aspect of the dissemination process is direct support of classroom and in-service activities.

7. Teacher resource.

The center should be considered to be as valuable a resource for teachers as for students. The wealth of information within the center must be directly available to teachers at all times.

8. Community resources coordination.

Resource speakers and field experiences are a source of career information. The center provides a logical place to catalog these valuable instructional aids.

9. A community resource.

The center should be available to adults from the community--both parents seeking knowledge to assist in their children's career development and others wishing to change careers or occupations. If the district conducts adult basic education programs, participants in these courses should be oriented to the center.

As illustrated in the six introductory vignettes, career resource centers may emerge in a variety of settings. The functions appropriate to any given center will be determined to a large extent by the developmental level of the students to be served and the location of the facility.

Centers At the Elementary School Level.

Career development activities in the elementary school focus on orienting children to the world of work. Primarily informational in nature, the elementary program enlarges the students' awareness of self and the ways in which environment and community will influence their lives. Attention is given to developing good work habits, along with basic manual, intellectual, and social skills. According to Smith (1970), the elementary teacher may also assist in the vocational development of students by working to "diminish the child's distortion about occupations; help children identify, understand, and interpret the significance of interests, capacities, and values; and help children acquire more effective decision-making skills" (p. 273).

Stamm and Nissman (1971) state that "providing information and vocational experiences is a practical response to the innate creativity and curiosity of the elementary school child" (p. 191). The typical elementary school program is laden with opportunities, within and without the curriculum, to provide career-related learning experiences. Information should be utilized to help children become involved in the learning process (Arbuckle, 1964); experiential classroom activities should require pupils to seek and use information. A career resource center or learning center at the elementary level needs to be based on structured experience-oriented activities.

Glasser (1971), in discussing elementary school learning centers, points out that they should provide a climate for self-actualization and help develop self-reliance, independence, self-awareness, and self-acceptance. Further, the learning center may also provide an instructional program designed around independent study through student option and act as a resource and service center for the school and community. Multi-media materials used in conjunction with a variety of teaching techniques become an integral part of the total learning process. Within this context, the child becomes a discoverer and a problem solver, thus enhancing the chance for learning to occur.

The elementary school learning center provides an ideal medium for conveying career awareness knowledge, while at the same time capitalizing on experiential techniques that contribute to the career development of the child. Whether a separate center is created or individual room centers are utilized will depend on the methods of instruction common to the school and the availability of space.

The trend toward use of pre-packaged teaching units for group and individualized instruction in the elementary grades enables a resource center to lend ready support to classroom activities. Reference books and resources on developing pupil activities need to be available to teachers so that they can design instructional packages. Relatively few elementary schools enjoy the luxury of having a counselor who does not have to be shared with another building. In addition, counselor-pupil ratios are usually quite high. So what is the responsibility of the elementary counselor with a regard to a resource center? Pupils, parents, and teachers are the fundamental focus of responsibility for counselors in almost all elementary schools. The elementary counselor should not become excessively involved with a center. Counselors can best serve the center by acting as consultants to the teaching staff in the selection and use of career awareness materials as well as for other typical kinds of concerns. An interested teacher, the principal, or a paraprofessional can readily assume responsibility for direction of a center.

Middle or Junior High School Centers

The name of the game in the middle or junior high school is career exploration. In discussing career development in the junior high school, Keller (1972) states that "career development activities at the junior high level must be held responsible for (a) helping students acquire the necessary cognitive tools for assessing one's internal and external environment--this includes a conceptual map for analyzing and synthesizing occupational information in order to establish goals, career plans, and career alternatives; (b) providing exploratory opportunities which are occupational and career supportive in nature--these experiences need to be both prescriptive and discretionary; (c) acquainting students with role models for future identification purposes; and (d) assisting students to design career blueprints for reaching both short term objectives as well as long range goals" (p. 198).

Keller defines career supports as those areas of the curriculum that have been restructured to enhance career education, such as the various subject matter fields. He suggests that the career cluster concept be used to focus exploration activities and that career guidance be used to coordinate and personalize learning experiences. The process of career exploration will be aided by the use of career resource centers, computers, simulation, occupational laboratories, and other media-oriented activities.

Functions associated with the middle or junior high school resource center will be essentially the same as those at the elementary school level. Informational and basic guidance services, curriculum development, teacher resource, and community use form the core of activities. The major difference between elementary and lower secondary level centers is the added stress on guidance services and the beginnings of thoughtful career planning.

The junior high years are in many ways the crucial years for children as for the first time they come face to face with deliberate career decisions that have long range consequences. To parallel this stage of development, center materials and activities at the junior high level should be more cognitively oriented and deal with more specific information than is required at the elementary level. Learning experiences should include a wide range of opportunities for role modeling, value clarification, personal assessment, and assimilation of career information. Resources should be geared to meet the needs of both pupils and teachers.

The High School Center

Career development needs undergo significant change in high school as students approach the imminent reality of work. At this level, young people need opportunities for testing value systems, attitudes, beliefs, and decision-making skills. Guidance programs here must provide more systematic support for students in career planning efforts and entry into the adult world.

Within the last half decade, serious attempts have been made to improve school district guidance programs. One such effort is the Life Career Development System (LCDS), developed under the direction of Garry R. Walz and available from Human Development Services Inc., Ann Arbor, Michigan. The LCDS is composed of nine instructional modules intended to help young people take charge of their lives and enhance their own life career development by increasing their competencies in wise planning and decision-making.

Another major project is Operation Guidance, under development at the Center for Vocational Education in Columbus, Ohio, since 1971. This program is directed toward schools' development of logical planning and management systems for guidance activities. A companion project called the Career Planning Support System is also in progress. Components of these two projects will be available for general use in the near future.

Some of the newer instructional systems and packages place a heavy emphasis on technological and supplemental materials. The information and resource functions of a career resource center need to be closely allied with guidance systems that provide extensive management and instructional practice. The broad range of user needs at this level necessitates comprehensive, relevant and varied materials that speak to a wide variety of ability levels and interests.

The educational and employment concerns of high school students contribute to the need for more systematically conceived guidance programs. Educational placement has long been a part of the high school counselor's duties, and pressure for counselors to conduct employment placement as well has grown in recent years. Helping young people find work is a highly involved and time consuming task that few counselors have time for. To be effective, employment placement should be the specific responsibility of some person, other than the counselor, who possesses the necessary competencies. Including a placement specialist on the career resource center staff might be a logical move. Since work-study coordinators are also involved in student employment, the option to include them in the center might also be considered.

In summary, the high school career resource center is highly guidance-oriented and may perform all nine of the functions listed in the Career Resource Center Functions section of this chapter.

Vocational School Centers

The vocational technical high school presents some challenges to career resource center design. The full-time, or comprehensive, vocational school is identical to a regular high school in most administrative and staffing aspects; guidance, counseling, and placement activities are generally similar. Likewise, the career development needs of students attending vocational schools approximate those of pupils in their home or parent schools.

These youths, although they have selected an occupation and are involved in direct preparation for the world of work, still require extensive guidance services. It is unrealistic to expect that all young people making an occupational commitment in ninth or tenth grade will maintain their interest in that field of work. Super et al. (1957) provide evidence that career choice by people aged 15-18 is not very stable. Gribbons and Lohnes (1966) suggest that perhaps only 50% of students in their tenth year of school are ready to engage in planning that will result in a stable career choice. Because of this instability of career choice by young people, guidance services for vocational school youth need to be as intense and complete as those provided for others.

Because of similar administrative structures and common student needs, it might seem logical for vocational schools and high schools to operate career resource centers according to a single mode. But scheduling adequate services for students attending vocational schools on a part-time basis presents unique problems. Time otherwise available for visits to a counselor is expended in travel. Frequently, students are neglected by guidance personnel at either school once they begin commuting between vocational and home schools.

A career resource center in the vocational school might help to ameliorate this situation. However, the instructional schedule of most vocational schools is already rigid enough to preclude much, if any, time for visiting a counselor or center. An alternative strategy for reaching students with career information is through classroom instruction. Recognizing this possibility, vocational school centers should attempt to include in-class presentations.

Of all the potential places for a career resource center, the vocational school seems the least likely. Paradoxically, however, this may be where a center is needed most.

Higher Education

College age students have many of the same career development and planning needs they had in high school, and the career resource center has not gone undiscovered by institutions of higher learning. Concern for adequate student guidance and counseling services has increased tremendously in recent years. Most colleges and universities now have counseling centers and with them, in some form or other, an area set aside for the display of career-related materials and information. Facilities range from sophisticated learning centers to storefronts and mobile vans. Bock (1973) reports that of the 55 new learning resource buildings opened on two-year college campuses in 1972-1973, only one was specifically a library. Resource centers exist on many college campuses, but few have been extensively described in the literature. Examples of the increasingly career oriented activities of college level counseling centers follow.

Taylor (1973) describes a counseling center that uses information supplied by a Civilian Transitional Program office on a nearby military base. He suggests that similar information could be retrieved from local Employment Security offices or Community Action Agencies. Davidshofer (1973) conducts career development groups that actively involve participants in seeking occupational information. He instructs students in ways to explore the world of work through observation of campus and other common resources, and group members share information during three one-hour sessions.

Odle (1967) describes the educational resource aspects of a student information center at the College of Idaho. A major objective of the center is to be a self-teaching center for students using educational-vocational materials. It operates on the assumption that students are more apt to use materials when individually motivated, and that materials are more effectively utilized when conveniently accessible and attractively displayed. Specific displays exhibit free materials; full-time employment notices; and information on study and reading skills, military service, travel opportunities, graduate and professional study, and related subjects. Staffing for the center is voluntary and materials are disseminated on an honor system.

Landrum (1973) pictures a similar "do-it-yourself" career laboratory at Slippery Rock State College in Pennsylvania. This laboratory operates in conjunction with the counseling and placement office of the College. Four stations: self-knowledge, career-knowledge, knowledge about your college major and related job opportunities, and know-how in getting jobs constitute the core of this facility. The center uses graduate students and volunteer help to provide basic material handling services.

Regional and State Centers

Many states have undergone school district reorganization in recent years. A common procedure has been to eliminate traditional county organization in favor of larger multicounty or regional administrative units. Because the responsibilities assigned to these units vary from state to state and within the states themselves, a variety of approaches to career education has evolved.

The Central Susquehanna Intermediate Unit 16 at Lewisburg, Pennsylvania, provides a career education service built around a regional center. Goals of the service are to supply current career information, to increase student awareness of options for occupational choice, and to supplement school district career education programs. Students complete an information request card which the center processes and responds to with a packet of information prepared for each individual. Packets are returned by van to participating schools and students may then make subsequent requests. The center also offers consultation on career development, in-service workshops, a media lending library, and a resource study library.

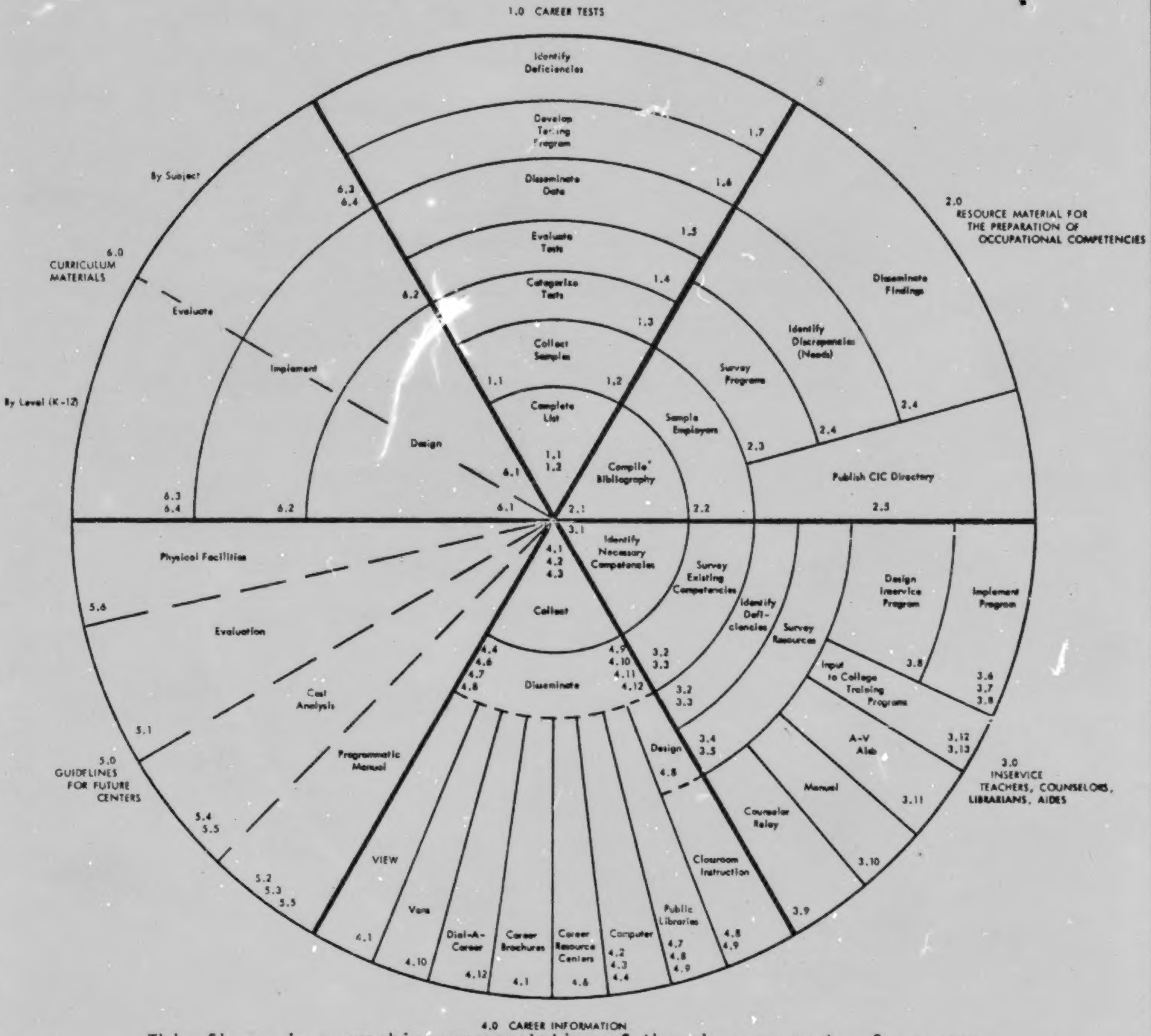
The California Pilot Career Guidance Center (1974) of the San Diego County Department of Education works from a model that can be replicated partly or wholly in other settings. The center is composed of six components: career tests; resource material for the preparation of occupational competencies; in-service for teachers, counselors, librarians, and aides; career information; guidelines for future centers; and curriculum materials. Figure 1 further details the center's functioning.

Departments of Education in some states, such as New Jersey and Pennsylvania, have established demonstration career resource centers for the primary purpose of providing guidance specialists and other educators with an opportunity to examine and "comparison shop" the broad range of commercial and non-commercial guidance materials. The New Jersey Occupational Research and Development Resource Center at Edison covers vocational education materials of all kinds, including guidance, and maintains displays of multi-media and technological hardware and software. Consultation and staff development services are available through most state level centers.

Summary

This chapter has traced the career resource center from the needs assessment stage, through planning, to various functions and designs in elementary, junior high, high school, vocational school, post-secondary, and state and regional settings. It stressed the vital necessity of assessing student and parent, teacher, and community needs and of translating them into viable goals and objectives which will then determine the activities of a career center.

Figure 1
Pilot Career Guidance Center Components*


1.0 CAREER TESTS
Identify Deficiencies
Develop Testing Program
1.7
Disseminate Data
1.6
Evaluate Tests
1.5
Categorize Tests
1.4
Collect Samples
1.3
1.1
1.2
Complete List
1.1
1.2
2.0 RESOURCE MATERIAL FOR THE PREPARATION OF OCCUPATIONAL COMPETENCIES
Disseminate Findings
Identify Discrepancies (Needs)
Survey Programs
Sample Employers
Compile Bibliography
2.4
2.4
2.3
Publish CIC Directory
2.1
2.2
2.5
3.1
Identify Necessary Competencies
Survey Existing Competencies
Identify Deficiencies
Survey Resources
Design Inservice Program
Implement Program
3.8
3.6
3.7
3.8
Input to College Training Programs
3.2
3.3
3.2
3.3
3.12
3.13
A-V Aids
3.4
3.5
Design
4.8
Manual
3.11
3.0 INSERVICE TEACHERS, COUNSELORS, LIBRARIANS, AIDES
Counselor Relay
3.10
Classroom Instruction
3.9
4.1
4.2
4.3
Collect
4.4
4.6
4.7
4.8
4.9
4.10
4.11
4.12
Disseminate
VIEW
Vars
Dial-A-Career
Career Brochures
Career Resource Centers
Computer
Public Libraries
4.1
4.10
4.12
4.1
4.6
4.2
4.3
4.4
4.7
4.8
4.9
4.8
4.9
4.0 CAREER INFORMATION
Physical Facilities
5.6
Evaluation
Cost Analysis
5.1
Programmatic Manual
5.0 GUIDELINES FOR FUTURE CENTERS
5.4
5.5
5.2
5.3
5.5
By Subject
6.3
6.4
6.0 CURRICULUM MATERIALS
Evaluate
6.2
Implement
By Level (K-12)
Design
6.1
6.3
6.4
6.2
6.1

This figure is a graphic representation of the six components of a career guidance center. The items within components are numbered and arranged according to sequential order of occurrence.

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*San Diego County Department of Education, 1974

Conducting a needs assessment or survey of guidance problems usually results in a mountain of information. If a career resource center is to become a reality, these data must be translated into an action plan. This chapter addresses itself to the development of an advisory committee, the activities of such a committee, and one of its many problems--money.

Chapter IV

The Advisory Committee

The development of strong relationships between the people most responsible for the project and the individuals and groups who may use the center or contribute to its operation is a frequently underplayed aspect of establishing a career resource center. One of the most effective means of insuring a successful project is to involve as many people as possible in the planning and continuing maintenance of the center.

The author listened to a group of career resource directors critique the events of their first year. Long before the end of the day, they agreed that most of their centers could have been more effective than they were. Seen as a primary cause of this was the lack of participation by persons other than guidance personnel in the centers' operation and planning. The projects experiencing the greatest difficulties in generating student and teacher use had made no attempt at involving teachers, students, parents, and others in the design and implementation stages. In contrast, directors who were more pleased with their centers' development had used some form of advisory or planning committee from the beginning. There is no better way to attract and hold people to an idea than to have them participate in forming it and seeing it to fruition.

The membership of the advisory committee should represent a cross-section of people. For example, if a program needs assessment has been completed, the committee might well draw from groups who were respondents to the survey. The core advisory committee should consist of seven to ten people, a size allowing for adequate representation of students, administration, staff, and community.

One of the first tasks of the committee is to examine how the establishment of a center will assist in career planning activities. Existing data should be scanned for program gaps or weaknesses which must be addressed. It may be necessary for the committee to review the basic principles of career development and decision-making theory so that all members understand and agree on definitions of terms.

Initial questions will deal with large issues such as the role of career planning in instructional programs or the need for occupational information. Other broad-based considerations will be how responsibility for teaching or guiding career planning will be determined, where the center will be located, and how money will be raised to purchase equipment and materials. As these issues are resolved, questioning will focus on more specific details of beginning the center.

At the earliest possible moment, the committee should prepare a rationale, or statement of purpose, for introducing a resource center into the school and present it to the faculty, student council, and community groups for their information and reaction. This can be an effective strategy not only for securing support for the enterprise but also for identifying people to recruit as task force members later.

With the statement of purpose drawn up, the committee's next step is to finalize goals and objectives. During this process, program planning begins in earnest--essential functions are identified and operational policy and staff requirements are set. At about this juncture, the committee usually needs to expand. Task force groups for special, in-depth assignments become necessary.

One of three areas of concern meriting extra attention is selecting a location for the center and determining what must be done to prepare it for use. Decor, furnishings, and storage facilities must be translated into budget items. The committee responsible for this area needs to communicate closely with the group charged with the second major task--planning the center's program of activities. Possible modes of instruction dictate aspects of room design and equipment. The selection of instructional materials and audio-visual equipment, the third area of concern, falls to another subcommittee. Again, a close relationship must exist between this group and the program planning committee. Cross representation among these groups will smooth communication; but the three task areas require substantial commitments of time and energy, and one or two people cannot be expected to carry the entire load.

Ideally, the advisory committee establishes a work schedule for all planning activities, allotting sufficient time for preparing a budget and, if necessary, a formal proposal. Methods for evaluating the center must be worked out at this stage, along with procedures for monitoring the project. With the designation of a center director and acceptance of the plan by administration and school board, the time arrives to begin work on the facility and to order materials.

In brief, these are the major steps in planning and developing a resource center. They are not discrete operations but are interlocked and, depending on individual situations, may occur in varying magnitudes or even in different order. Within each of these broad areas of concern is a multitude of important operational details. The advisory committee is responsible for establishing the goals, objectives, functions, evaluation procedures, and general policies of the center and for staffing the installation. The core committee approves all detail work accomplished by sub-groups, prepares an operational budget, and maintains a continuing advisory relationship with the center staff. The reference section cites excellent detailed examples of how to use advisory committees and begin planning a career resource center.

Where Will the Money Come From?

Four primary sources of funds for educational purposes are available to those attempting to establish a career resource center. Local, state, federal, and private monies can be tapped for this purpose, depending on the legal status of the host institution and the state in which it is located.

Historically, federal money under the Elementary and Secondary Education Act or the Vocational Education Act has helped schools initiate practices which might have significant impact in education, including career resource centers. Many states have given resource centers priority ranking for the Title III funding under the Elementary and Secondary Education Act. Part B and Exemplary monies in Vocational Education have also funded resource centers.

However, the pattern for federal funding is now undergoing some radical changes. The new Elementary and Secondary Education Act eliminates Title III as a specific source of guidance money. Title IV of the new act combines guidance, library, and other support services so that they compete for the same funds. These monies will eventually flow directly to local school districts, largely eliminating the project strategies previously utilized in many states. In other words, guidance will have to compete with other school services for its share of federal money coming into the district.

One aspect of this situation favors the career resource center. Since the fundamental characteristics of the resource center resemble those of the library, and in many schools it is considered an adjunct of that facility, money under Title IV, ESEA may be channeled into career-related materials with little controversy. The reader is advised to become totally familiar with the details of this new legislation before drafting any proposals.

In all probability, Vocational Education money will continue to be the most accessible source of special funds for career resource centers. As of this writing the provisions for guidance in vocational education are not expected to change significantly. However, the American Personnel and Guidance Association has introduced a bill which calls for categorical funding of guidance services. The first draft of this legislation contains a section specific to the funding of career resource centers. If this bill emerges on its own or as part of the new Vocational Education Act, it could become an important source of guidance funds.

A number of states have recently passed legislation related to career or occupational education. The state of California (Department of Education, San Diego County, 1974), for instance, sponsored a pilot demonstration career resource center with the intent of introducing the concept to all school districts. Although generally not as extensive as federal funds, state money, categorical and otherwise, represents a major financial resource in some states.

Perhaps the most commonly overlooked resource available for developing centers is local funding. Several sources may be tapped. First, and probably the most potent, are the local vocationally-oriented service clubs such as Rotary International and Kiwanis International. Groups such as these are constantly looking for projects to support, especially those that have vocational implications. Given a convincing presentation, such organizations can generate both financial backing and public support. A broad business-industry base could be developed through these groups or through the Chamber of Commerce to provide financial help. These organizations may also pave the way for the second source area. Most communities have foundations and trusts, administered by banking institutions, with specific provisions for directing interest from capital to the betterment of the municipality. An examination of these possibilities may prove beneficial. Larger and better known foundations represent a third possible source of local funding.

Many school districts discover that special project funds are not necessary to establish a career resource center. More than a few centers are the products of local initiative and money. Unquestionably, project money reduces implementation time and may provide a more sophisticated range of equipment and materials immediately. Nevertheless, a careful analysis of presently available materials, a reasonable budget proposal, a willing administration and school board, and some patience can create an excellent center in the space of a few years. The career resource center need not be a tremendously expensive proposition. Judicious planning, budgeting, and utilization of community resources can do much to hold down original and continuing costs.

Two final sources of assistance reside in community groups, such as neighborhood associations and citizen organizations, and the school's student population. Again the influence of local social groups can be two-pronged, yielding money or volunteer help and improving public relations. In many instances these organizations can provide furnishings for the center and in the process become familiar with the center and its purpose. Students represent a largely untapped resource, not necessarily financial, but of manpower for the completion and operation of a center. Extensive involvement of students also generally exerts an indirect positive effect on the center's budget.

Summary

This chapter emphasized the need for an advisory committee to assist in the planning and operation of a resource center. It presented an outline of the committee's major planning tasks and discussed possible means of funding a career center.

Chapter Three outlined the programmatic structure and purpose of the career resource center. However, unless building space is available for the center, these issues become academic. Chapter V is devoted to a brief discussion of the common problems related to the location and physical development of a center.

Chapter V

The Facility

Programs and Populations

The nature of the facility will, in large measure, be affected by the parameters of the program under consideration. Every effort should be made to establish a fully comprehensive program within the center, but this is not always possible. The program to be implemented in the center will dictate space requirements and use. The various populations the center will serve must also be kept in mind. Although a career resource center is normally student-oriented, planners should anticipate the needs and habits of movement of other potential users and examine community demands on auxiliary facilities.

Location of the Career Resource Center

The location of the career resource center depends on where in the building extra space is available, how space can be reassigned, and the scope of the intended program. It is important that the room be located near the main flow of student traffic. If this is where the action is to be, a spot that is highly visible will be best. A ground floor location is most desirable as it insures easy access, especially for handicapped students.

If it is possible to locate the center adjacent to the present guidance office, this is usually the most expeditious plan. With many classrooms being vacated by declining enrollments, some maneuvering and minor renovation could make one or two of them usable as a center. Large storage or conference rooms near the guidance suite also have conversion potential.

Taylor and Hull (1969) suggest less obvious locations, and a close inspection of the building may turn up such possibilities as a converted cafeteria, gymnasium, stage, or storage area. Not as attractive but still worth considering are dead-end hallways, large stairwells and landings, or any of these coupled with a classroom or two.

Sometimes, though, space in the building just does not exist. This means that what might have been a reasonably inexpensive undertaking now has the potential of soaring out of sight in terms of cost and acceptable options.

The best solution would be the construction of a two-million-dollar building addition. A more reasonable expectation would be a small expansion of the library or guidance offices--a project perhaps long overdue. Barring a mortar and bricks approach, modular or temporary classroom structures are another alternative; units of good quality are available. Similarly, a standard mobile home trailer may provide a solution. Smaller mobile vans also aid itinerant counselors, providing them with office space and a miniature resource facility.

Basic Layout Considerations

Because the majority of resource centers come into existence in renovated rooms of one sort or another, the balance of the information in this chapter assumes that the reader is involved in such a situation. Suggestions are directed toward producing an optimum facility for a reasonable cost.

Flexibility is a key concept in planning auxiliary facilities. Space for resource centers should be planned to reduce the chance of instant obsolescence due to program changes and to accommodate a wide range of current activities (Meckley, 1972). Demands on the resource center will vary widely with individual and group use.

Gross and Murphy (1968) assert that books, magazines, audio-visual and electronic resources, visual displays--everything a center has to offer--should be open, "inviting students to partake at any time, all the time" (p. 57). Although this mode of operation is an ideal, it may not be entirely practical except in certain situations with older students. Not all students are able to work profitably alone; many need and desire structure, especially if the basic instructional mode of the school is highly traditional. In addition, uncontrolled use of materials precludes evaluating the extent to which various resources are utilized, and hence the value of each activity. The happy medium of center operation reflects normal school climate, assures proper use of materials, and allows the greatest freedom of access to all users.

If the center is to be truly student-oriented, the decor should attract young people. Carpeting, acoustical treatment, prolific use of bulletin boards and display cases for exhibiting local manufacturers' or students' projects, colorful walls and furnishings all help make a center an interesting place for students to work and browse. Large plants also contribute to a more pleasant surrounding.

Seating arrangements may include stackable straight chairs, more comfortable reading chairs, and couches. Even within the confines of institutional furnishings, imaginative selection and coordination can produce a warm, attractive effect.

Office space that is an immediate part of the center should afford a maximum amount of privacy, especially if used for counseling purposes. Privacy may be increased by using movable screens or partitions. Placing offices adjacent to the main reception area and security storage units results in more controlled operation of the center.

The organizational plan for filing and retrieving career materials influences the arrangement of shelving and storage units. To maintain maximum room flexibility, mobile storage and display units should be used as extensively as possible. Backs and sides of storage cabinets and shelf units can add to available bulletin and tack board space. In study areas, book stacks need to be at least 16 feet apart to allow room for tables. A factor of approximately 35 square feet per student should be used to determine seating capacity. A suggested ratio for estimating seating need is to have study carrels for accommodating 75% of the students and enough tables for the rest.

Because so many career materials are for individual use, the study carrel is often found in resource centers. The carrel is an enclosed work area, usually about 40 inches square, in which students can operate various audiovisual media. Localized lighting, electrical outlets, and outlets for random access and television systems are usually included in the carrel, as are book shelves and a drawer for earphones. Carrels may be placed in groups of two or four in various parts of the room where casual supervision can be maintained. Twelve to fourteen square feet per carrel should be allowed.

Among the more sophisticated items that are becoming increasingly common in career resource centers are computer terminals, microfiche readers, and reader-printers. Computer terminals require an electrical source and a telephone line outlet; the best time to make provision for terminals is during renovation. Microfiche readers recquire only an electrical outlet. Both the computer terminal and the microfiche unit require about 35 square feet per installation. Equipment of this type must be located to allow at least casual supervision at all times and direct assistance when necessary.

Since special media equipment such as a computer or microfilm system represents a sizable investment of money and serves as a primary informational source, it should be a focal point of the center. Positioning should enhance the flow of students both to these units and away from them to other support materials. Soft copy occupational information resources can be arranged around the perimeter of the main information source, thus concentrating these materials at the most useful point.

Summary

All aspects of a center's short and long range program goals and objectives should be considered in final layout decisions. Most career resource centers are established in rooms requiring some renovation. Program activities, information systems, organization, and services offered to users will substantially dictate design and operation. As a rule, a center should be centrally located and attractive to students.

In recent years every conceivable medium has been employed to convey career development information and experiences to students. Materials that support career planning are the substance of a career resource center and the major reason for its existence. This chapter discusses the use of media in guidance and counseling, examines materials and equipment used by centers, and provides some hints on how to select from all that glitters on the dealer's shelf.

Chapter VI

Materials and Equipment

The plethora of career education, career development, and/or career guidance media now marketed makes selecting worthwhile and appropriate materials to serve the objectives of a comprehensive resource center an almost overwhelming task. The abundance of resources available is revealed in recent studies of career education materials.

Peat, Marwick, Mitchell, and Company (1972) assessed commercial career education materials for the United States Office of Education. Of the more than 6,000 materials evaluated, 3,566 were in the career information target area. Eight hundred fifty of these were judged to be of high quality. Five hundred items were pronounced applicable for curriculum use, 614 for career preparation, and 1,129 for guidance. Twenty-two per cent of the assessed material was appropriate for grades K-6, 27% for grades 7-9, 36% for grades 10-12, and 13% for grades 13-14. Printed materials comprised 54% of the items examined, 32% were film products, and the remainder were manipulative in nature. Sixty-six per cent of all materials examined cost less than $100 each. Considering that Peat, Marwick, Mitchell and

Company completed their study in 1972 and publishers have continued to roll their presses, the task confronting a materials evaluation committee looms enormous.

Media in Counseling and the Classroom

Historically the printed word and static illustration have been the predominant means of transmitting information and knowledge in the classroom. The typical method of modifying behavior and attitudes and imparting knowledge in guidance settings has been dialogue between counselor and client. The revolution in media technology, however, has drastically altered old ways of communication. As a result, educators are relying more and more on variant media forms to increase their impact on students who have become sophisticated through contact with commercial television (Dudek, 1972).

Great portions of the world of work are beyond the reach of students and must be experienced vicariously, thus strengthening the need for accurate and realistically presented materials. A fundamental advantage of the audio-visual medium over written or verbal communication is its capacity to communicate in a life-like manner, transcending time and space limitations. This characteristic renders the multimedia approach attractive to educators involved in career education and development activities.

The way in which a learner acquires knowledge is regulated by the materials employed. Edling (1966) notes that learning through media begins at the subjective level, with maximum cues acquired from use of either audio or visual stimuli. The learner proceeds in stages to the objective impact of combined audio-visual presentation, learning progressively to codify cues in preparation for the ultimate three-dimensional experience of working directly with people and/or things. Edling's observations suggest that media-oriented teaching materials, to be most effective, need to be sequenced according to learning cue level. This process analysis has particular relevance to using media instructional techniques in the career education of children and youth.

O'Hara (1968) states that children must learn about careers, that there is a cognitive factor. He holds that readiness to use occupational information, for example, depends on the presence of need and the degree of motivation. Therefore, career information must be contained in a structured learning format. Media forms such as films and simulations are motivational in nature and should be inserted into the flow of instruction at points which capitalize on this characteristic.

Lifton (1964) discusses the use of media in counseling, stating that clients will best incorporate information when: "(1) the information is presented in a way which enables them to use the facts with a minimum of transfer, by 'involving' the learner, (2) they are secure enough to allow themselves to perceive the situation broadly, (3) they have perceived a need for this information to achieve a goal important to themselves" (p. 22). Clients must be ready to seek, use, and incorporate occupational information and need a variety of stimuli to encourage these processes. Lifton's discussion replicates Edling's hypothesis. The client should be helped to move from the subjective to the objective by gradually raising the cognitive cue level until knowledge and experience are integrated.

Discussion so far has focused on conditions relating to materials for classroom or person-to-person use. Many career resource centers, however, make extensive use of individualized, minimally guided instruction. Eisele

(1973) states that such instruction accounts for individual differences through "(a) determining learner needs from broad educational goals, (b) the specification and selection of related and appropriate instructional objectives, (c) the design of suitable instructional strategies and media, and (d) the evaluation of learner progress and instructional effectiveness and efficiency" (p.239). Further, "a modern interpretation of an instructional strategy and medium is that they be based on prespecified outcomes, sound learning theory, and predefined learner characteristics" (p.241).

Multimedia materials are an acknowledged facet of career development education today, and the manner in which they are used in the instructional process is of concern. Evidence indicates that media-oriented activities and learning experiences must be structured sequentially and directed toward enhancing teaching objectives. Materials must be available in sufficient number and variety to support this mode of instruction. We move now to examining the range of media forms most common to the career resource center.

Materials and Media

Instructional media fall into three broad categories: printed materials, audio-visual presentations, and mechanical or systems approaches.

Printed materials

Published resources include career briefs, pamphlets, brochures, magazines, books, and miscellaneous documents and publications. The career brief is the basic piece of occupational information and may be obtained from a number of commercial publishers and several state Employment Security Services. Briefs provide a concise description of an occupation, listing important facts necessary for understanding what is done on the job, personal qualities needed for success, educational background required, employment outlook, and other pertinent data. Comprehensiveness varies with publisher, grade level of intended use, and additional variables examined later in this chapter.

Professional societies, labor organizations, and business and industry associations produce pamphlets and brochures to generate career interest in specific fields. As a rule such materials are free or inexpensive, attractively prepared, and accurate. They provide valuable insights which elaborate on information found elsewhere.

Books cover a wide range of topics related to careers. Several publishers specialize in career-oriented books that provide in-depth coverage of broad career areas as well as specific jobs. Autobiographies, biographies, and selected fiction can be used to increase students' awareness of personal qualities needed for various kinds of work and life-styles associated with particular fields. Books on topical areas such as growing up, interpersonal problems, economics, and leisure time activities are also appropriate for inclusion in a career resource center.

Magazines represent a resource rich in career information. Publications on topics ranging from fashion to auto mechanics can be highly useful, particularly at the junior and senior high school level. Such national publications as the Occupational Outlook Quarterly and Manpower magazine are appropriate for high school youth. Career comic books are available for children. Since a resource center serves teachers and other adults as well as students, documents, journals, and publications of federal, state, and local agencies make good display materials.

Audio-Visual Presentations

Including a substantial number of audio-visual products in a career center is recommended for several reasons. First, such materials are a highly effective means of communicating attitudinal and cognitive concepts. This is particularly true of visual media. Second, audio-visual materials are natural starting points for students with reading difficulties. Third, audio-visual presentations are an effective and appealing mode of providing insights into life-styles and personal factors associated with occupations. Finally, cleverly designed visuals are excellent motivators for discussion groups and useful for developing further information-seeking behavior.

Audio cassettes featuring interviews with various workers may be purchased from a number of commercial sources. Elementary and secondary pupils can create interview tapes of their own. With careful preliminary planning and some patience, exceptionally rewarding experiences can result from students' conducting and taping interviews.

Filmstrips and slide presentations are two of the most economical visual forms. Coordinated with audio tapes, recordings, or a well written script, the filmstrip is an excellent instructional tool for classroom, group, or individual use. Topical areas covered by commercially produced filmstrips and slides run the gamut of career related topics. Slide-tape programs, variations of the filmstrip, can be locally produced. This medium adapts well to short depictions of local businesses and industry and to brief visual reports and orientations to project activities.

The use of television as an educational device is not yet fully realized, although many school districts have production and reception equipment. Major problems center around coordinating air and class time and changing teacher attitudes toward using television. Advances in cable television and miniaturization of portable equipment exert a continuing positive effect on acceptance of this medium. Educational Television Network affiliates have provided substantial assistance in the preparation of some excellent career guidance films. In Pennsylvania, ETN facilities produced a series of orientation films directed toward primary vocational education programs. A number of other states have produced similar packages. Many high schools, area vocational-technical schools, and colleges have the capability to produce their own career or occupational films, thus creating learning experiences as well as contributing to career information resources.

Bernabei and Case (1972), Jepsen (1972), and others examined the use of video tapes in occupational education. They reported that use of this medium either increased the accuracy of images of occupations or effected change in attitudes of students toward the occupations studied.

Movies constitute a most effective medium for conveying broad concepts and attitudes. For intensity, dramatic appeal, and realism, the motion picture can hardly be equaled. Many excellent film series have been produced recently. The American Personnel and Guidance Association series, "Why Not Explore Rewarding Careers," is representative of efforts in this field. In An Evaluation of Career Guidance Films (1971), the Culver City Unifed School District reports that the Doubleday Media film series, "Careers in the 70's," positively influenced student attitudes toward work and motivated them to seek additional information and to make career choices. Available films cover the health services, building trades, business and office occupations, communications, and many other fields.

The high unit cost per film or series of films has restricted the use of motion pictures. Many states are responding to this problem by trying to improve the resources of regional or state media centers. Lacking the aid of a regional media center, adjacent school districts can choose a film series, budget separately to purchase selected portions, and then share the films with each other on a regular basis as a means of making more films available. Business and industry in several states have purchased some of the more expensive career films series and loan them to local schools. With careful planning, rental arrangements can be made to work satisfactorily.

A variant of the motion picture, the 8mm and super 8mm film loop, is making a comeback in both commercial and homemade forms. Several manufacturers recently introduced film loops in topical areas of guidance and career development. Encyclopedia Britannica effectively pairs an earlier series of film loops with new job interview cassettes, but film loops typically have no sound track. Laramore (1968, 1971) details how to produce 8mm film loops; slide tape programs; and short, inexpensive, locally-oriented sound films. Moeller and Cox (1971) caution that, although the homemade film loop is a productive way to disseminate occupational information, it is not sufficient in itself as it cannot effectively portray more than one or two concepts at a time. For optimum effect, supportive materials must be supplied.

Mechanical or Systems Approaches

Disseminating career information through mechanical apparatus requires production treatment not called for by printed materials or audio-visual presentations. Information systems based on microfilm or computer technology have emerged primarily in experimental, localized situations. As a result, project costs are often too excessive to permit transfer of the systems, thus limiting the rapid spread of these techniques. Nevertheless, during the past few years microfilm and computer systems have had significant impact on students in the delivery of occupational information and interactive counseling.

Microfilm System. In 1963, as an attempt to respond to several basic shortcomings of traditional modes of occupational information dissemination, the guidance staff of the San Diego County Department of Education initiated the VIEW program (Vital Information for Education and Work). VIEW allows for more frequent up-dating of data on local labor market conditions and offers more efficient access to and storage of that information.

Technology used in VIEW is the microfilm aperture card. This is a data processing card containing a small window of microfilm upon which six to nine full-sized pages of script are photographed in miniature. The aperture card is a form of microfiche, and user schools must acquire a microfiche reader or reader-printer to retrieve full size copy. With the print-out capability of the reader-printer, students have their own copy of pertinent information to take home and discuss with parents.

The VIEW-scripts, as they are called, are concise occupational briefs written in semi-outline style, generally at about the sixth grade reading level. Information contained in the scripts follows NVGA guidelines. Occupational titles are usually referenced by Dictionary of Occupational Titles codes. These scripts contain data regarding the local or regional and national outlook for specific jobs, wages, and training and educational opportunities.

The aperture card is an extremely economical item in and of itself. A deck of 250 occupational cards requires about the same amount of space as a standard 5" x 8" file box. Production technology makes it possible to revise and distribute decks or single cards with considerable ease and speed. However, the development and creation of the basic product, a "camera-ready" occupational brief, is relatively expensive. For this reason, local efforts to implement VIEW have not taken hold; VIEW requires a substantial student user base to be economically feasible.

Equipment cost is an additional problem area. The expense of reader-printers and student print-outs causes VIEW programs to stagnate in some places. Acquisition of readers and reader-printers can be justified more readily now since the equipment can be used with ERIC research documents, library materials, and microfilmed student records. A combination of several inexpensive readers and a single reader-printer provides an ideal information system.

Studies by Pierson, Hoover, and Whitfield (1967), Whitfield and Glaeser (1969), and Tadlock Associates (1972) describe the VIEW system. The Tadlock study analyzes several VIEW-type production centers in California, concluding that the concept is highly worthwhile and holds considerable potential as a dissemination technique. VIEW-type projects currently operate in over 30 states and serve millions of young people. A national consortium of these states, in cooperation with the Department of Defense, has produced a military VIEW Deck. This set of approximately 100 service-related occupational briefs will be provided in microform to all schools in the nation utilizing the VIEW system. (Non-user schools will receive soft copy editions of the briefs.)

Mechanical devices, such as microfilm readers and reader-printers, can be used as the impetus for encouraging students to experiment with other forms of occupational information. Students take innovation in stride. The machine attracts, and if other activities and materials are programmed around its use, students experience few problems with acceptance of other forms of media.

Computer Systems. The past decade witnessed a substantial growth in the use of computers in guidance. The computer has three advantages over other information-generating media: speed of retrieval of accurate information, voluminous information storage capacity, and ease of up-dating or revising stored information. With the fantastic increase in quantity of available information and the simultaneous broadening of the informational base to include localized data, it has become impossible for counselors to keep abreast of supply. The computer has great potential to assist counselors with this task.

Despite their recognized potential, however, computer systems are not widely used. Of nearly a dozen experimental guidance computer systems initiated in the last ten years, some with substantial financial backing and field testing, a few have completely shut down and others are operating with greatly reduced budgets. Project VICS (City of Philadelphia School District, 1974) is one of the prototype systems still in operation. It is a straight-line occupational and educational retrieval system developed by the School District of Philadelphia. All 20 of the city's high schools are included in the network. A similar project developed by the State of Oregon in cooperation with the Bureau of Employment Security achieved a cost ratio of approximately $2.00 per student (McKinlay and Adams, 1971). Houghton Mifflin Company/Time Share Corporation markets the most successful commercial system available to date.

Early enthusiasm over computer technology in guidance waned in the face of costs that never diminished and the inability to acquire necessary equipment. Kroll (1973) reviews computer-based systems for career guidance and information and acknowledges the progress made in this field. But he tags present prospects "quite modest" and estimates that significant dissemination of computer technology is at least a decade in the future.

The computer terminal can become the keystone of a career resource center. It can direct students to other information forms and experiences with greater ease and efficiency than any other method. Because of this, there seems little doubt that utilization of computers will grow, despite cost problems. Readers wishing to investigate further the use of computers in guidance are directed to the Additional References section following this chapter.

Simulations

Many aspects of the world of adult work are beyond the general experience of children and young people. It is often neither practical nor possible for pupils to experience certain life situations directly. Hence, professional interest in the use of simulation gaming techniques and simulated "hands on" experience has grown.

Boocock's "Life Career Game" (1967) is one of the better efforts made in the area of simulation gaming techniques. In the game players encounter decision-making experiences related to the labor market, educational market, and marriage market. Techniques used in the "Life Career Game" are widely copied, and a growing number of "games" is being produced commercially. Some of these are overpriced and of questionable quality, so care should be exercised in the selection of this type of instructional aid.

Hamilton and Krumboltz (1969) report the development of an occupational simulation kit which provides "hands on" experience for students. Marketed by Science Research Associates as the Job Experience Kit, it is made up of packets representing 20 different occupations. A series of self-administered trial activities allows the student to attempt relatively simple tasks associated with various jobs. The exercises are especially appropriate as prevocational experiences at the junior high school level.

If a career resource center has space for classroom-size activities, then simulation gaming, role playing, and similar techniques may be incorporated in its program. Gingerich et al. (1973) find, though, that career kits and games are not widely used at the centers studied. They hypothesize that the length of time required to use kits or games may be a deterrent. If this is true, activities of this type are probably best reserved for classroom use.

Community Resources

Although community resources are neither systems nor printed or audiovisual materials, they are a form of occupational information that is growing in use. Speakers willing to come to the school and field trips to businesses and industry are the two major kinds of community resources. Locating speakers and organizing field experiences are legitimate functions of the resource center staff, although teachers may be expected to make their own contacts in some schools. A master file of these resources kept in the center serves as a reference for teachers and administrators.

Evaluating and Selecting Career Materials

Serving on an instructional material evaluation and selection committee is time consuming and arduous but educationally profitable. The committee's activities continue well beyond the opening of a resource center, as new materials enter the market and old ones require review due to passage of time or changing conditions. Careful assessment of materials is essential if ultimate usefulness to school and community is to be achieved.

Teacher, parent, student, and community representatives may serve as committee members. Those with an understanding of learning theory and curriculum development and a sense of the aesthetic can make valuable contributions to the evaluation and selection process. Parents and students bring the perspective of the learner to the preview process. Delegates from the business community can provide content validation for many materials.

Before beginning the comparison of materials, evaluators must acquaint themselves with the goals and objectives of the center's operations and with the programs it will support. This knowledge helps the selection task force ensure that an adequate supply and variety of materials will be available for all center activities. Knowing what will be taught, who will be taught, and why certain kinds of materials are needed makes it easier to determine depth, appropriateness, and motivational effectiveness of materials under review. Guidelines and criteria for selection need to be established at the outset.

Since many of the materials under scrutiny are heavily weighted with career-related information, specific standards for ascertaining accuracy of content are required. Items intended to impart knowledge about occupations and the world of work need to be examined carefully to insure satisfactory consideration of the following areas:

1. Nature of the occupation, the occupational field, and its importance.
2. Work performed in the occupation, occupational field, or industry.
3. Description of the work setting.
4. Personal rewards derived in the occupation or field.
5. Experiential or educational entry requirements and options for advancement.
6. Future outlook of the occupation or field.
7. Licensing or membership requirements necessary for entry into the occupation or field.
8. Personal attributes or qualifications needed for success.
9. Related occupations.

Developing criteria for judging materials is difficult, but these are aids for reducing the anxiety and increasing the efficiency of the selection committee. A valuable aid in developing a yardstick for measuring the instructional characteristics and overall technical aspects of various resources is "Selecting Instructional Materials for Purchase: Procedural Guidelines," a joint project of the National Education Association and the Association of American Publishers (1972). The National Vocational Guidance Association (NVGA) publishes concise guidelines for analyzing and evaluating career materials of all kinds. The 1971 "Guidelines for the Preparation and Evaluation of Career Information Media: Films, Filmstrips and Printed Materials" (National Vocational Guidance Association, 1971) has become the criterion reference document for publishers and media users. In addition to the nine areas of concern listed above, the NVGA publication suggests attention to vocabulary level, general format, revision or publication dates, quality of illustrations, quality of the product itself, stereotyping and bias, additional information sources, references for training or education, sources of financial aid, and credit assignments.

A checklist for rating and comparing items will simplify the job of evaluating and selecting materials. The NEA-AAP publication mentioned above provides some assistance in this matter. Abt (1970) uses a model that weighs and ranks materials on scales of a variety of instructional concerns basic to classroom use. Topper (1973) devised a shorter evaluation chart which focuses primarily on content. Use of one of these or other rating forms is essential as long as materials are being purchased for the center. Appendix A lists materials typically found in career resource centers. Table 1 evaluates the materials used in 17 junior high resource centers in Pennsylvania (Lewis, 1974). Table 2 is a similar report of the evaluations made in five Pennsylvania senior high school centers (Gingerich et al., 1973).

Evaluation and Selection of Equipment

The media and equipment orientation of a career center is a possible source of difficulties in instructional programming and budgeting. The stage of selecting equipment for a center is one at which planners can become "penny wise and pound foolish" or absurdly extravagant. Unfortunately, no tried and true rules of thumb exist to provide infallible direction for evaluators.

Equipment needs rely on a number of interrelated factors. Will the center be used only for browsing, will it encompass a full-blown activities-based program, or will it be something in between? Which program components will be included? What are the reference and media requirements of associated activities? What kinds of predictions can be made concerning maximum-minimum student use? How many structured career-related programs will operate in the building? What requirements will teachers have for use of the center? Will the center include a microfilm or computerized information system? Will television be used? What equipment is already on hand?

An estimate of student utilization of media may be gained by discussing student use of library equipment with the library staff. A rigorous analysis of prior student interest in guidance materials, as reflected in the requirements of the established programs, provides another measure. Teachers who anticipate integrating career education objectives into their instructional routines should be encouraged to identify materials and activities they specifically desire and to provide a time-line for their expected use of the center.

Table 1

Summary of CRC Directors' Evaluation of Equipment and Materials
High School

Item	Usage	Cost	Comments
Hardware			
Reader-Printers	Average	$375 to $1,000	Frequently needs repair and expensive to operate. Higher priced models have fewer repair problems.
Tape Recorders	Average	$100 & Up	Low maintenance, easy to operate and inexpensive.
Film Strip Projectors	Average	$80 & Up	Most popular piece of equipment in the CRC.
Microfilm Readers	Average	$85 & Up	Easy to operate, few maintenance problems.
Cassette Player-Recorders	Average	$315	Excellent for junior high.
Computerized Guidance System (ILS)	High	$1,900 for 70 hrs. + telephone	Excellent motivational device. Performs quick search of occupational and/or college data. Access to telephone tie-lines limits use to only a few school districts. Cost/benefit ratio is high.
Cassette Sound-Film Strip Projectors	High	$275 & Up	Few mechanical problems. Used by individual pupils but classroom use could serve many additional pupils.
Sound Film Strip Viewer/ Players	High	$85 & Up	Few maintenance problems, easy to operate.

Table 1 (cont.)

Item	Usage	Cost	Comments
Audio-Visual Aids			
Film Strips	High	$12 & Up	Very durable, most popular item in the CRC. Excellent educational value.
PENNscripts	Average	Free	Printed copies made on inexpensive equipment are sometimes difficult to read. Has a good educational potential.
Occupational View Deck	Average	$145 & Up	Good for student to relate interest to occupations.
College View Deck	High	$320	Recommended for use only with CRC staff assistance.
Sound Film Strip	High	$39 & Up	Usually of excellent quality.
Career Games			
Career Games	Low	$28 & Up	Excellent for high achievers. Supervision and explanation needed with low ability pupils.
Psychology Today Games	High	$40	Used in mini-courses and small groups. Excellent for all students.

Table 1 (cont.)

Item	Usage	Cost	Comments
Career Briefs			
Career Brief Kits	Average	$125	Excellent for expos[illegible] jobs in broad fields at [illegible] educational levels.
Job-Experience Brief Kits	Average	$390	Excellent for han[illegible]on experience in 20 occupations. Very expensive.
Occupational Guidance Units	High	$800	Broad occupational coverage easily updated.
Handbooks			
College Catalogs	High	Free	A must for every center.
Occupational Outlook Handbooks	High	$5 & Up	Excellent descriptions and up-to-date coverage.
Dictionary of Occupational Titles (D.O.T.)	Average	$8	Excellent reference.
Encyclopedia of Careers	High	$25	Excellent reference.
Vocational Guidance Manuals	Average	$110	Manuals become outdated too quickly to justify investment.
Vocational Guidance Manuals	Average	$1.95 ea.	Small compact booklet on one subject area. Easy to use and carry home. Has good potential.

Table 1 (cont.)

Item	Usage	Cost	Comments
Career Opportunities	High	$60	Can be used with groups. Provides supplementary information.
College Handbooks	High	$20 & Up	Necessary for college-bound pupils.
Other Materials			
Armed Services Information	Average	Free	Up-to-date information on careers and training available in the Armed Services.
State & Federal Civil Service Announcements	High	Free	Excellent job descriptions and skill requirements.
Occupational Files	High	Free	Should be updated and evaluated.

Table 2

Summary of CRC Directors' Evaluation of Equipment and Materials
Junior High School

Item	Usage	Cost	Comments
Hardware			
Automatic Sound Filmstrip	High	$275 & Up	Works well, light bulb has short life, excellent for junior high school.
Sound on Slide Projector	Average	$800 & Up	Difficult to keep sound at prime level, records are easily scratched, picture is clear. Stimulates awareness and interest.
Tape Recorders	High	$80 & Up	Easy to operate, low maintenance.
Microfilm Reader	Average	$100 & Up	Easy to operate, low maintenance.
Film Strip Projector	High	$100 & Up	Very popular, low maintenance.
Audio-Deck Head Set	High	$40 & Up	Low maintenance, used with cassette records and filmstrip projectors.
Reader-Printer	Average	$400 to $1,600	Frequently needs repair, expensive to operate. Higher priced models have fewer repair problems.
Study Carrel	High	$90 & Up	Excellent for individual pupil work station, cuts down on distractions within the center.
Listening Center	Average	$30 & Up	Easy to set up. More than one student can participate at one time.

Table 2 (cont.)

Item	Usage	Cost	Comments
Audiovisual Aids			
PENNscripts	Average to High	Free	Up-to-date local job information. Used more by older students, good reference.
Sound Filmstrips	High	$42 & Up	Frequently used, excellent quality.
Filmstrips	High	$15 & Up	Very durable, most popular item in the CRC. High motivation.
Cassette Tapes	High	$15 & Up	Very popular, easy to use. Up-to-date.
Occupational View Decks	Average	$145	Good for students to relate interests to occupations.
College View Deck	Low	$320	Should be used only with staff assistance.
Sound on Slides	High	$700 & Up	Quality is average, very expensive.
Career Briefs			
Job Experience Kit	Average	$140	Excellent for hands-on experience in 20 occupations.
Occupational Guidance Units	High	$250	Good supplemental and detailed information.
Career Brief Kit	Average	$125	Excellent for exposure to jobs in broad fields.

Table 2 (cont.)

Item	Usage	Cost	Comments
Occupational Exploration Kit	Average	$125	Easy to use.
Career Awareness and Exploration Kit	High	$80	Good introductory material for CRC.
Handbooks			
College Catalogs	Low	Free	Limited use below grade 9.
Occupational Outlook Handbook	Average	$8	Good for up-to-date coverage.
Encyclopedia of Careers	Average	$25	Excellent reference.
Vocational Guidance Manuals	Low	$110	Limited use.
Career Opportunities	High	$70	Can be used with groups. Provides supplementary information.

Selecting and purchasing equipment requires that evaluators understand some of the mechanical and technological aspects of machines. Manufacturers are attempting to simplify equipment to encourage greater utilization, but many people do not feel qualified to make purchasing judgments. Practically every school district has a staff member identified as audio-visual coordinator. Equipment purchases should be thoroughly discussed with this person and his or her advice followed to the greatest extent possible. The media specialist knows the range of available equipment, what various models can and cannot do, how frequently repairs and maintenance are necessary, and how and where services can be secured.

This does not mean that a program with a piece of unfamiliar equipment should be rejected. Talking things over with the audio-visual coordinator provides an opportunity to examine the issue and make some judgments. When unusually sophisticated equipment such as computers is involved, the media specialist knows where to find help and consultation. Because of the importance of the relationship between the resource center staff and media specialist, and for the reasons stated above, the author believes it is unnecessary and perhaps inappropriate to provide a "recommended" list of manufacturers and equipment beyond the discussion that follows.

Audio Equipment

The interview tape is one of the most frequently used items in many career resource centers. Most of these tapes are commercially produced, so two or three tape players normally will suffice. Tape players need not be expensive, and the audience capacity of each machine can be increased with multiple jacks. Headphones ensure that use of the players does not interfere with other center activities.

Every center should have at least one high quality portable tape recorder-player for recording special activities and other important functions. If students decide to create a set of localized interview tapes, several less expensive portable tape recorder-players will be needed. An inexpensive recorder-player should also be included in the center.

Basic Audio-Visual Equipment

The movie projector is still the primary piece of audio-visual equipment in a center, although the filmstrip is beginning to supplant the motion picture as the most widely used visual resource. Every center should have a 16mm sound motion picture projector available. Ideally, this machine should be a part of the normal equipment maintained in the center; but in smaller schools, this may not be possible because of limited budgets.

During the past few years, super 8mm motion picture equipment has become quite inexpensive. Many schools develop libraries of homemade films on local businesses and industries, providing valuable resources as well as exciting learning experiences for student film-makers. Business concerns often donate other films about their field of work. Coordinated with student-produced tapes, these create local documentaries that have great appeal for students. Because of relatively low production costs, films and tapes can be frequently revised and up-dated.

A related piece of equipment is the super 8mm film-loop projector, on which single-concept film-loops can be run. This is a useful tool for individual and small group learning situations. It is possible to produce homemade film loops at reasonable cost, and commercial publishing houses are making efforts to improve materials using this medium.

Because filmstrips are used in a wide variety of instructional settings, it may be necessary to purchase several types of filmstrip projectors. At minimum, the center should be equipped with one heavy-duty filmstrip recorder/cassette unit for large group presentations. A combination recorder/cassette viewer should be obtained for small group or individual use. If study carrels are part of the center's facility, the smaller combination units now manufactured could be installed in about half of them.

Some career resource centers may be able to draw on the talents of highly trained audio-visual technicians to produce special slide-tape or multimedia presentations depicting local business and industry operations. Barring these capabilities, centers may acquire commercially produced slide-tape programs. Also many college representatives carry brief slide programs as standard equipment. An automatic slide projector should be available for use in the center at all times.

Finally, each center should have an overhead projector. This device is a must, not only for showing transparencies in classroom situations, but for conferences and staff presentations outside the center. Audio-visual equipment used infrequently can usually be borrowed from regular school media supplies.

Microfilm Equipment

With localized occupational information systems in over 30 states and at least one major publisher of occupational information offering microfiche as an optional form, the market for retrieval equipment is burgeoning. The advent of the ERIC system and increased microfilming of student records have contributed to the acceptance of microfilm as a viable communications medium.

Selection of microfilm readers or reader-printers is governed by several factors requiring an understanding of the materials to be used in the equipment. For most school applications, one or more of five different microforms is appropriate: 35mm roll film, 35mm cartridge, flat microfiche, aperture cards, and microfilm jackets. All VIEW programs use either aperture cards or regular microfiche, as does the ERIC system. Hence, equipment with microfiche capability is in all likelihood most appropriate for a career resource center.

Where a student-contact microfilm system is in operation, use of a single heavy-duty reader-printer in combination with several inexpensive satellite readers is recommended. Microfilm readers and reader-printers are for the most part substantially constructed and should elicit little concern about user abuse, providing students are properly oriented and at least minimally supervised.

Computer Systems

As previously noted, computers are a potentially useful instructional tool, but they are not widely used. However, several commercial enterprises have recently developed useful programs, and it is reasonable to expect that in the near future computers will meet greater acceptance. The major functions of a computer terminal in a career resource center involve computer assisted instruction, counseling, and direct information retrieval.

Like microfilm viewing equipment, computer terminals can handle only a given number of students at a time, and most schools are able to finance the purchase of only one or two terminals. Highly structured computer-assisted counseling programs can be restrictive, tending to hold students in terminals for long periods of time unless adequately supervised. A 45-minute program sequence provides terminal time for only eight or ten pupils a day, further substantiating the need for extensive back-up materials. Well designed programming reduces this problem by providing numerous exit opportunities from the computer system to other support items.

The two most practical means currently available to most school districts of introducing computer-assisted programs are regional consortia or experimental projects. If properly developed and managed, either of these alternatives can be highly rewarding. Districts wishing to do it on their own can now find second and third generation computers for sale or lease to use in limited program designs. To state the obvious, sound professional advice is recommended for such planning.

Television

Television is achieving some degree of its expected potential as an educational technology. Career resource centers provide a number of opportunities for using this medium. State departments of education, regional educational laboratories, and state educational television networks have developed excellent television programs in career and vocational education. An outstanding series, "Bread and Butterflies," is produced by a national consortium of state educational television systems. Fine productions are also being created by local school districts.

A portable video-tape camera and play-back unit meets minimum resource center television needs. This device permits students and staff to develop films of various jobs and job analyses. The unit can be used for role-playing job interviews and in other simulation activities. Video equipment expands the capabilities of a building wired for closed circuit or cable television. Many industries routinely produce video-tapes of their production methods which, in some cases, they are willing to loan to schools. Sources of this kind should be exploited to whatever degree possible.

Summary

The careful selection of instructional materials and related equipment is one of the most important steps in establishing a career center. Those charged with evaluating a center's materials must have a firm grasp of the fundamental concepts related to classroom use of media and its application in special instructional settings. Complete understanding of the goals and objectives of a resource center and its associated programs is essential for the development of appropriate review criteria and guidelines.

By tradition, guidance specialists are responsible for organizing, filing, and retrieving career information; and even before the arsenals of information available today, it was difficult to coordinate materials with guidance and classroom activities. This chapter reviews the need for information in the guidance process and examines why its use does not always achieve the expected impact. It also discusses the relationship between the information system and guidance and classroom programs and offers suggestions on how to infuse career information into career planning more effectively. In conclusion the chapter presents several organizational file plans and methods for improving the fit between information services and guidance programs.

Chapter VII

Organization of the Center

Career Information--What Is It?

Until recently, "career information" was generally considered synonymous with "occupational information," largely because most guidance information was job oriented. Printed materials are the most common vehicle for communicating detailed information, and extreme reliance on this method has tended to lock thinking into these forms. The coalescence of career development theory, the revolution in media technology, and the emergence of career education have brought about a realization that career information, or even occupational information, is more than just data about what happens on the job. Given present day conditions and needs in guidance and career planning, career information can be defined as all materials, media, and experiences brought to bear in assisting individuals to solve problems, make decisions, select occupations, and otherwise mature as competent, sensitive human beings. Career information is the sum total of printed and audio-visual media, personal interviews, field trips, counseling interactions, real work experience, and all other experiences an individual brings to the career planning process.

The Need for Information in Guidance and Career Development

Living is a succession of decisions --some large, many small. Depending on our skills and the quality and amount of information at hand, we can decrease the "puzzlements" we meet in life by the decisions we make. Guidance reduces "puzzlements" by providing clients with decision-making skills and information.

Conversations with counselors and students reveal great dissatisfaction with the informational component of school guidance programs. Students and parents question how much counselors are helping young people cope with problems. Pertinent, accurate, current information is an important ingredient. Why are there problems with the guidance function of providing information to students?

Problems Related to Organizing and Disseminating Information

Information--collecting, organizing, storing, and retrieving it--is an inordinately large problem area in guidance. Severinsen (1973) states that counselors are too dependent on printed materials and tend to assume that information provided without assistance to the user will suffice. They sometimes give information at the wrong time or without regard for individual characteristics. Finally, Severinsen points out, counselors who are not sufficiently interested in career development see information management as a low priority function and do not approach it systematically. Many interested counselors also fail to use information effectively through inability to systematize their efforts.

If a career resource center can be in any way a liability to a career guidance program, it is in information dissemination. Loughary and Bowman (1970) recognize the complexities of disseminating information. The explosion of information and the rapidity with which it changes are almost beyond comprehension. Much of what has been learned about information collection, storage, and retrieval in recent years is highly sophisticated but far from being realistically applied. One counselor or teacher response to this situation is the attempt to put all information pertaining to careers in one place--be it the library, a separate room, or a renovated guidance office. The danger of this response is the temptation to substitute a place for a program, accomplishing nothing. On the other hand, one great virtue of a career resource center is that it provides better conditions for organizing information and brings the career development program of the school into focus.

If information is not sufficient in itself, what else is necessary? Loughary and Bowman (1970) point out that student involvement is frequently missing in counselors' planning efforts. Information should meet user needs. Why not ask users what their needs are? Martin (1971) asserts that counselors need to know more about the youth they serve and implies that much of what they already know may be superficial.

In short, school information services fail due to problems involving handling and organizing the mass of information and determining how it is to be transmitted to students, what kinds of information are needed, and how best to use it. An effective information dissemination process is essential to the success of a career resource center. How can the process be improved?

Information and the Career Development Program

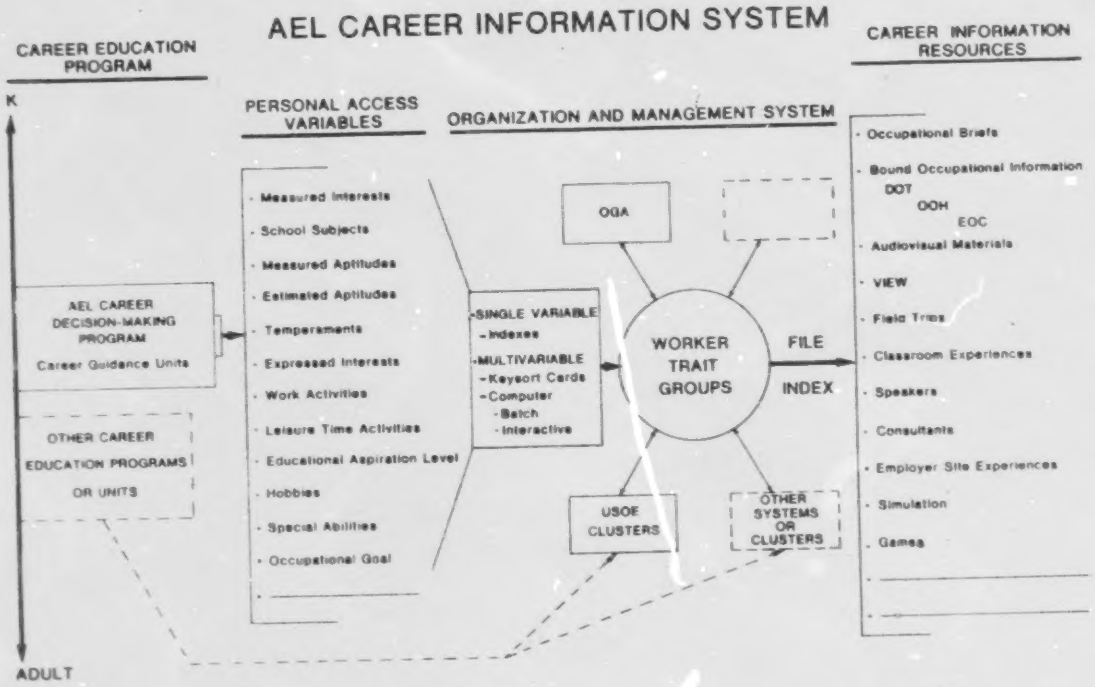
To ameliorate the problems inherent in handling career information, attention must be paid to two broad areas. One is making the informational aspects of career planning activities meaningful and useful to students. The other is integrating information with other information--insuring internal consistency or agreement between bits of information.

Different schools employ varying instructional frameworks to accomplish goals and objectives. Career-relevant curriculum is a strategy for implementing career development education. Field trips and classroom resource speakers are ways of imparting occupational information, affecting attitudes toward work, and preparing students for employment interviews. Career-oriented objectives can be prepared for other aspects of the curriculum as well.

The relationship between guidance and resource center staff and teachers involved in a career-relevant curriculum is normally supportive. Ideally, counseling practices flow naturally from the informational content of classroom instruction. Hence, goals and objectives for the curriculum and the guidance program should be developed in concert, meshing informational and material resources of the center to best advantage. Individual and group counseling techniques and assessment procedures should reflect a master career development education plan. Teachers should understand and be aware of counseling strategies regularly employed by guidance staff. Such understanding is also essential for paraprofessionals and non-guidance professionals working in the resource center.

Classroom units in decision-making and various assessment techniques may be devised to link the career development education program to the activities and information base of the resource center. Figure 2 illustrates an approach the Appalachia Educational Laboratory (AEL) at Charleston, West Virginia, designed as a linkage mechanism. AEL developed a 16-unit career decision-making program as a classroom or guidance component of the career development curriculum. Personal access variables based on Dictionary of Occupational Titles "worker trait group" classifications mediate between curriculum and information base. Students learn the personal variables through classroom instruction, counselor contact, and assessment instruments. They explore how personal variables and worker traits are related, and use indexes, keysort cards, or computers to locate further resources also coded by worker trait group.

Figure 2.


AEL CAREER INFORMATION SYSTEM
CAREER EDUCATION PROGRAM
K
AEL CAREER DECISION-MAKING PROGRAM
Career Guidance Units
OTHER CAREER EDUCATION PROGRAMS OR UNITS
ADULT
PERSONAL ACCESS VARIABLES
Measured Interests
School Subjects
Measured Aptitudes
Estimated Aptitudes
Temperaments
Expressed Interests
Work Activities
Leisure Time Activities
Educational Aspiration Level
Hobbies
Special Abilities
Occupational Goal
ORGANIZATION AND MANAGEMENT SYSTEM
SINGLE VARIABLE
Indexes
MULTIVARIABLE
Keysort Cards
Computer
Batch
Interactive
OGA
WORKER TRAIT GROUPS
USOE CLUSTERS
OTHER SYSTEMS OR CLUSTERS
FILE
INDEX
CAREER INFORMATION RESOURCES
Occupational Briefs
Bound Occupational Information
DOT
OOH
EOC
Audiovisual Materials
VIEW
Field Trips
Classroom Experiences
Speakers
Consultants
Employer Site Experiences
Simulation
Games

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The American College Testing Program of Iowa City, Iowa, developed a Career Planning Program (CPP) for grades 8-11. The basic component of the program is a student workbook that leads the pupil through a series of career planning steps. Students are introduced to job families and educational avenues leading to the world of work and are assisted in developing self-awareness in relation to careers. CPP uses the Data-People-Things concept to provide a fundamental understanding of work, and self-check lists to help students assess their interests and competencies.

John Holland's Self-Directed Search (SDS), published by the Consulting Psychologists Press of Palo Alto, California, is a linkage mechanism intended primarily for use in counseling settings. The SDS assumes that workers in a given vocation have similar personalities and histories of personal development and that most people can be categorized into combinations of six personality types: artistic, investigative, social, conventional, enterprising, and realistic. Using SDS, students inventory their competencies and interests and correlate them with a master list of occupations common to the various combinations of personality types.

Interest inventories are the most widely used method of connecting students with career information. The Kuder Occupational Interest Survey published by Science Research Associates in Chicago and The Ohio Vocational Interest Survey put out by Harcourt, Brace, and Jovanovich of New York are the two surveys most frequently used at the secondary school level. The New York Psychological Association's Minnesota Vocational Interest Inventory and the Los Angeles-based Stanford University Press Strong Vocational Interest Blank are suitable for upper secondary and older youth.

Multiple aptitude batteries such as the Differential Aptitude Test produced in New York by the Psychological Corporation and the General Aptitude Test Battery of the United States Employment States Employment Service are also useful in linking counselees with information. Vocational maturity and work values measures are available, too. Among those most widely accepted are Crites' Career Maturity Inventory, Attitude, and Competence Tests, published by CTM/McGraw-Hill of Monterey, California, and Super's Work Values Inventory, published by Houghton Mifflin Company of New York.

In summary, two principal strategies exist to help the pupil become aware of essential career information and learn where and how to find it. One method is to use classroom-based or guidance programs that lead the student through a planning or instructional sequence resulting in use of information. The second procedure uses assessment instruments like interest surveys, aptitude batteries, and vocational maturity measures to stimulate further career exploration. Cooperation among teachers, counselors, and resource center staff in developing career education program goals is essential to organizing occupational information in the most valuable manner.

Organizing Career Materials

The career information file is the core of a resource center. Within this core reside materials ranging from books to computer printouts. filmstrips to microfilm, and career briefs to lists of resource speakers. How can these diverse materials be organized for most effective use? This question has stirred the imagination of counselors for decades; some of the many worthwhile books on the subject are listed at the end of this chapter. But there is no "best method" for organizing materials. There are a number of useful "systems" for guidance people willing to start them up and keep them going.

Loughary and Bowman (1970) list six steps to help organize career information systematically:

1. Identify the tasks involved in maintaining a guidance information system.
2. Match these tasks with the competencies of staff members.
3. Acquaint students with general guidance information and help them learn how to use information sources.
4. Help students learn to use guidance information for personal planning.
5. Get student reaction to information processes and mode.
6. Periodically find out from students and others what information should be added to the system.

Most of these steps can be tackled by counselors and teachers alike. Once materials are organized and a staff member is assigned responsibility for their upkeep, the next step is teaching people how to use the system. This is a step which counselors have historically avoided. As information systems are more properly utilized with adequate instruction, those integrated directly into career development units or career planning activities enjoy the greatest use. Any students who learn the system along with other information gathering tools may be tapped for productive feedback on the system and materials and equipment.

The Appalachia Educational Laboratory's Career Information System (CIS) mentioned in the previous section is a comprehensive effort to systematize career materials. Storage and retrieval of information in the system is based on cataloging all materials--VIEW cards, briefs, cassettes, filmstrips, brochures, books, and so forth--according to the worker trait groups found in the Dictionary of Occupational Titles. A card index provides access to materials; each occupation in the system is indexed alphabetically and cross-referenced to common alternate titles. CIS uses keysort cards in conjunction with interest inventories, an activities preference checklist, and a "Guide for Exploring Careers through Worker Traits." Intended for use by secondary school students, CIS may be integrated with an existing filing system to preserve the best features of each. The system will be marketed commercially in 1976.

The Bennett Occupations Filing Plan and Bibliography published by Interstate Printers and Publishers, Inc. of Danville, Illinois, is a popular occupationally-oriented system for filing information. Its organizational scheme is based on the field-of-work coding from the Dictionary of Occupational Titles. The plan includes a set of pre-printed tabs for file folders and instructions for setting up the system. All types of career materials can be cataloged and filed under this system.

Ann Roe's (1956) two-dimensional occupational classification scheme is the prototype for several computer based informational systems and an untold number of "home-made" systems. Occupations are categorized on one level according to the kinds of activities workers engage in, clustering jobs that share common factors. A second dimension is job stratification according to level of responsibility, skills, or capabilities required. The classification system is a simple, effective method for categorizing occupations.

The basic two-dimensional system was expanded by Roe and Kloss (1972) to include two additional factors that further clarify the nature of contrasting occupational clusters. Factor I separates interpersonal relations, or working with people, and natural phenomena-oriented occupations. Factor II specifies orientation to purposeful communication or resourceful utilization. With the field and level dimensions of the original system superimposed on the axes created by Factors I and II, the Roe and Kloss system illustrates the degree to which various occupations involve contact with people and the natural sciences and the type and degree of communication and organization skills they require.

The U.S. Office of Education Career Clusters are a method of categorization suitable for elementary, middle school, and junior high career resource centers. The cluster concept is especially appropriate for these grade levels because career education at these levels focuses primarily on awareness and exploration of clusters of jobs rather than specific occupations. The Career Clusters present some difficulties in placing specific occupational titles, but the problem of a job's appearing in more than one cluster can be solved through strict adherence to the distribution of occupations within each cluster. Accompanying lattices based on criteria such as skills or educational level required insure adequate access from different points. The Career Cluster system, like all classification systems presently available, is derived from a given theoretical base and must be counter-balanced in some way to offset any inherent weaknesses.

Unquestionably the most useful system available is that provided by the Dictionary of Occupational Titles. Almost without exception, all commercially prepared occupational briefs are identified with this six-digit code, and most are categorized according to the basic areas of work:

0
  Professional, technical and managerial
1

2 Clerical and sales

3 Service

4 Farming, fishery and forestry

5 Processing

6 Machine trades

7 Bench work

8 Structural work

9 Miscellaneous

In addition to this "Occupational Arrangement," the Dictionary of Occupational Titles groups occupations according to an "Areas of Work Arrangement," based on products made, services performed, and processes or materials used; and the "Worker Trait Group Arrangement," based on worker qualifications. An offshoot of the worker traits arrangement is job classification according to worker involvement with information (data); the public or fellow workers (people); and equipment, tools, or materials (things). Career resource centers which obtain substantial data on the local labor market through the Bureau of Employment Security and maintain an active placement service should use Dictionary of Occupational Titles code numbers regardless of the classification system they choose.

In addition to banks of occupational information, resource centers maintain files of college and educational publications (including specialized training opportunities and financial aid), social-personal and values clarification materials and games, military facts, job-placement announcements, and general career development materials. The center must be designed so that students, teachers, and the public experience little difficulty in finding desired resources. Areas should be clearly marked and referenced at each entrance with a diagram or instructions list; tables and seating accommodations should be located nearby. The availability of these materials should be communicated in the natural course of the career development education program.

Although most counselors rely on commercial and other prepared materials, local information on occupations, educational opportunities, helping agencies, and resources is important also. Systematic information gathering should be the responsibility of a specific individual. Data can be gleaned from vocational education advisory committees, the Chamber of Commerce, or regular de-briefings of community resource people; new information should be integrated regularly into the master file plan.

Summary

Information service is basic to the functioning of school guidance and career development programs. To be useful, information must be systematically collected, analyzed, and filed for easy access. Students need current, realistic career information appropriate to their personal circumstances. The success of a school's career development and planning program depends heavily on how well the career resource center is organized to provide this service.

It is often expected that a modicum of efficiency in guidance and counseling services will result from concentrating guidance materials in one place--the career resource center. However, unless staffing responsibility is clearly thought out, creating another place for the counselor to be or watch over may produce undesired results. The first section of this chapter discusses the general administrative thrust; the second, the relationship between center functions and staff assignments; and the third section outlines specific staff responsibilities.

Chapter VIII

Staffing the Center

Jacobson (1972) states that the career resource center situates all guidance functions in one location to increase the availability of services to students. A center should be a student-oriented place where occupational, vocational, financial aid, and placement information is readily available. Counselors, work experience coordinators, college scholarship counselors, and others staff a center to assist pupils in career planning and decision-making. Ideally, the staff is a highly diversified group of people.

Many centers begin as the result of one person's labor, and many are relatively small scale facilities. But implementing a center requires people. Regardless of how ambitious the project is, considerable assistance is needed to maximize the gain in service or time for counseling. In the end, local conditions control how duties are distributed among staff members, but this chapter takes an idealized approach to staffing and responsibilities.

Administrative Responsibility for the Center

According to Circle et al. (1968), a center should be considered a function of the guidance department and coordinated from that office since its primary services are guidance related. This may be true for centers at the secondary level, but elementary resource centers are apt to be a part of the library and operate under the authority of the librarian. Lines of authority for administering a center are a policy matter to be determined by the advisory committee and cleared with the school principal or district superintendent. Because designating authority for a center involves changing job descriptions, which in turn bear on district personnel policy, the matter should be approached in a deliberate fashion.

Although the advisory committee sets policy, one person must have responsibility for the operation of a center. If this person is a counselor, he or she reports to the director of guidance or building principal. If the director of guidance is designated director of the center, then the line of authority will be to that person's immediate superior. In any case, the center director should report to the advisory committee as well and establish a schedule for doing so.

Center Functions and Staff

Distribution of duties among center staff members is governed by the basic structure of the career development or guidance program, the competencies of available personnel, and functions the center will provide. The nine possible functions of a center described in Chapter III are related here to project staffing requirements.

Function 1: The collection, analysis and storage of career information and materials.

Collection of data can be the responsibility of almost anyone associated with the center, but direct responsibility for the activity should rest with a specific professional staff member. The same is true of analysis, although some aspects of this function such as the review of career materials may be assumed by the advisory committee. Storage and general handling of information and materials may be assigned to a number of people, with a paraprofessional or clerical person invested with most duties.

Function 2: The retrieval and dissemination of career information and materials.

Center users absorb much of this function, and clerical or paraprofessional workers exert most control over it. All professionals associated with the center should, of course, be able to use all resources without difficulty.

Function 3: Counseling and personal assessment.

Responsibility for this function devolves entirely on the professional staff. Paraprofessionals employed in the center should assume no responsibility in this area.

Function 4: Placement Service.

The person charged with this optional center function may be a counselor or a teacher. As the placement specialist works directly with students, he or she should have professional level qualifications.

Function 5: Work-study coordination.

Vocational programs requiring work-study coordinators establish clear guidelines for these people. The work-study coordinator has the same general relationship with students as the placement specialist and thus should also be of professional status.

Function 6: Curriculum development.
With regard to curriculum development, the role of the center is primarily supportive. If larger districts employ a specialist in career curriculum development, the person obviously will be of professional level.

Function 7: Teacher resource.
Teachers perform this function as the center is open for their direct use; clerical personnel provide necessary support.

Function 8: Community resources coordination.
Either a professional or a non-professional can assume the deliberate solicitation of community resources for use in the school. The decision of professional or non-professional depends largely on local preference. Cataloging, a major facet of this function, requires clerical skills.

Function 9: A community resource.
This is a function of the center as a whole and therefore draws on the competencies of the entire staff.

An analysis of staffing functions reveals clear demarcations between professional and non-professional level duties. Information and materials dissemination activities need rigid definition in this respect, especially where these duties touch upon the counseling process. The responsibilities of guidance counselors are adequately described in many textbooks and will not be dwelt on here. A major reason for developing a center is to increase the time counselors can spend working directly with students in group and individual counseling. Changes in the counselor role must be locally prescribed as part of on-going assessment of center effects on the guidance program. Other professional level job titles, in addition to counselor, suggested by the functions analysis are center director or coordinator, career specialist, placement specialist, and work-study coordinator. Suggested paraprofessional job titles are clerk-typist, and volunteer helper.

Specific Staff Responsibilities

Director-Coordinator

The coordinator of a career resource center needs a sound understanding of career guidance practices and career development theory, including its possible applications. This person should be a competent administrator and have some background in curriculum development and school procedures. A thorough knowledge of the community and experience in working with business and industry are highly desirable.

General supervision of the center and its personnel are the director's main concern, although the responsibilities of the administrator may include "doing it all"--from budgeting, selecting, and organizing materials to working with teachers on career development activities, keeping records, and writing the monthly newsletter. The School Department of Alameda County, California (1972), the Pennsylvania Department of Education (Dittenhafer and Lewis, 1973), and the San Mateo Union High School District (1972), among others, have developed guidelines for assigning staff responsibilities.

Career Specialist

The use of the term "career specialist" is arbitrary. Alternate titles, depending on the scope and nature of a center's program, are "guidance specialist," "occupational information specialist," and "career education specialist." Duties of this office are governed by the expectations of a given center. Hoppock and Novick (1971) describe an occupational information consultant who is a composite of the people who now collect, write, handle, and disseminate occupational information. This consultant:

> Determines what occupational information teachers and counselors need to make instruction and counseling more relevant to the world of work,

Identifies entry-level jobs in the community;

Serves as a liaison between school and business and industry;

Develops opportunities for students to obtain career information;

Explores and interprets possibilities for computerized career counseling services;

Maintains a library of materials on careers and employment opportunities;

Provides teachers with career information to incorporate in course content;

Assists the guidance staff in organizing and conducting career guidance activities;

Organizes and prepares research studies relating to students' career choices and placement;

Develops and implements ways of publicizing occupational information to all students.

Such a specialist would be an asset to any center, especially in regional or statewide operations.

In smaller centers, the coordinator and the career specialist may be the same person. In any case, the basic thrust of the career specialist's job is the collection and use of career information. Career specialists work in the community, provide direct assistance to teachers, and work instructionally with students. This position should be filled by a certified counselor or teacher.

Placement Specialist

Inclusion of placement services in the career resource center will do much to attract non-college bound students to the facility and help them become aware of what can be accomplished with center materials and services. When funds do not permit the employment of a placement specialist and arrangements can be made with a representative of the State Bureau of Employment Security, every effort should be made to secure these services. Layman et al.

(1972) describe a triangular relationship between the school counselor, the school placement specialist, and the Bureau of Employment Security staff.

During the early part of each year, the school placement specialist devotes time to the task of preparing seniors for employment. The placement office might conduct classes or groups on job-seeking and job-keeping skills. In late winter direct work with students who are looking for work begins. In addition to performing these student contact duties, the specialist researches graduate placement and local job opportunities and employment trends, develops feedback systems on center occupational information, and solicits industry contact people.

Work-Study Coordinator

This position can be established in one of three ways. The first and most obvious is relocating the vocational program work-study coordinator in an office associated with the center or otherwise clearly associating this person with the center.

A second option is to employ a person specifically to coordinate all prevocational field experiences. If the school in which a center is located has no approved vocational programs, this person may be the catalyst for developing such instructional areas. Where regular programs exist at the home building or at area vocational technical schools, this individual works in cooperation with the vocational program coordinators.

In schools with substantial numbers of students in pre-vocational or career-experience programs a third option is recommended: employment of a separate work-study coordinator. Supervision of work-study programs must be as close as that required of approved vocational programs. Duties of a pre-vocational experience program coordinator include: supervising students, conducting community job surveys, locating field experience sites, setting up field trips, evaluating the program, and assisting the center director or career specialist in developing occupational information.

Career Resource Aide

The use of classroom and counseling aides has flourished in the last decade, primarily due to economic considerations and the realization that trained paraprofessionals can competently assume some of the duties normally assigned to professional staff. The most common advantage of their use in the resource center is to provide basic services to students, allowing counselors and other specialists freedom to work with students. Paraprofessionals are key people in the operation of a center, and every effort should be made to insure their proper selection, training, and supervision.

There now exists an abundance of material on incorporating paraprofessionals in guidance programs. The National Association of Pupil Personnel Administrators publication, Pupil Personnel Services Guidelines for Selection, Training and Use of Paraprofessionals (1972), and the 1974 American Personnel and Guidance Association monograph, Paraprofessionals in Counseling, Guidance, and Personnel Services by Zimpfer (1974), provide an excellent starting point for developing paraprofessional programs. Various state departments of education print guidelines for selecting and employing paraprofessionals. In fact, before setting policies on employing paraprofessionals, it is wise to check the state school code for pertinent sections, particularly if aides are desired in an instructional capacity.

The first step in building a paraprofessional program is to identify paraprofessionals' tasks. Their duties vary greatly according to a center's range of functions; but most aides' responsibilities center on handling information, operating equipment, decorating the room, maintaining the equilibrium of the center, and general clerical work. Kosuth and Miltenberger (1972) add setting up appointments for speakers, work experience opportunities, testing, interviews, and completing surveys or interest inventories to this list of duties. The guidelines mentioned above offer more task suggestions.

After projecting the duties of paraprofessionals in the resource center, the next considerations are selection and training. Concluding a one-year pilot guidance program with paraprofessionals, Warner (1972) reports the following personal qualities essential for success in paraprofessional work: (1) capacity to deal with people; (2) ability to work in a structured situation; (3) willingness to function in a subservient role; (4) ingenuity and initiative; and (5) readiness to learn, do, and be directed. Hiring should be carried out with an eye toward these characteristics. Training typically follows one of two patterns. One pattern is a course of study at a technical school or a two- or four-year college. Formal programs train teacher aides and educational paraprofessionals. Some states have approved programs for preparing counseling paraprofessionals; state departments of education can provide this information. Post secondary institutions may work cooperatively with school districts in the pre-service development of auxiliary personnel.

The second, more common, training pattern is for the local school district to conduct its own pre-service training of aides. The task may be assigned directly to the coordinator of the center. In this circumstance, the coordinator should seek all available outside assistance and determine if nearby school districts are contemplating similar training activities before developing a program. Stinson (1970) recommends that time spent in preparation of support personnel be fairly brief and that activities be concrete and specific. Emphasis should be on frequent practice and drill within field or laboratory settings. Final portions of a training program must include opportunities to work under the direct supervision of counselors or those responsible for evaluating paraprofessionals' performance.

In-service training of paraprofessionals should be conducted periodically. Such training should provide general guidance background; vocational, occupational, and educational information; and instruction in audio-visual equipment and testing. Salim and Vogan (1967) also recommend encouraging paraprofessionals to attend professional meetings and conferences. Bowman and Anderson (1971) remind planners of programs employing the career ladder concept to make provisions to increase paraprofessionals' skills. School districts may be able to devise cooperative arrangements with degree-granting institutions to capitalize on existing academic courses and programs. Paraprofessionals seeking to upgrade their skills should be granted release time to pursue advanced work, and school district policies should permit transfer from one type of work to another.

Clerk-Typist

In many career resource centers, duties generally assigned to a clerk-typist will be assumed by paraprofessionals. When aides are heavily engaged in direct student assistance duties, however, the need for clerical assistance grows. Generally, the clerk-typist acts as receptionist, types all correspondence, and provides assistance throughout the center as needed.

Volunteer Helpers

Many school districts rely widely on parents and other interested adults to augment and support regular staff. As with other staff positions, the duties and responsibilities assigned the volunteer worker should be carefully specified. Basic training in the use of equipment and career materials and an understanding of the organization of the center are minimum prerequisites to volunteer work. Helpers are useful in locating students; collecting, cataloging, and filing materials; conducting tours; typing newsletters; serving as receptionists; and otherwise assisting in the center under the direction of staff members. Volunteer programs have a useful side-effect, too: increased public awareness and acceptance of the facility.

Summary

The size of the staff of the career resource center will match the ambitions of projected programs. Clearly, staff responsibilities must be well defined. Respect for the number of duties various staff members can perform cautions against overextending staff capabilities and resources. Hiring specialists and auxiliary workers requires general district concurrence on their place in the staff hierarchy. Advisory committees might well take a developmental approach to the implementation of a center, working from a long range plan and phasing in staff and functions as the program permits. Numerous guidelines offer assistance to planners as they develop staffing policies and pre- and in-service activities.

Career resource centers require sizable commitments of money, space, and time. A center alters the thrust of the guidance program, affects the assignment of counselors, and exerts an influence on the entire school. Such a heavily endowed, influential, and, hopefully, meaningful facility merits careful evaluation. Discussion in this chapter focuses on aspects of the resource center which can and should be rendered accountable and how assessment measures may be applied.

Chapter IX

Evaluating the Center

The pressures of accountability necessitate a permanent evaluation design. Activities must be justified in terms of educational appropriateness, over and above monetary concerns. Systematic evaluation assesses the validity of activities and appraises the need for program change and restructure.

Evaluation is most readily accomplished and most productive of useful data when the program objectives of the center are stated in terms of student outcomes, as recommended in Chapter III. Simple statistical techniques should suffice in most data analysis, with rigorous methods reserved for experimental projects.

An evaluation should begin with attention to the expected outcomes of center programs. The advisory committee may consider the following:

How many or what percentage of pupils use the center?

How many teachers use the center?

How many business-industry representatives schedule visits or presentations at the center?

How often are particular materials used? Who uses them?

How frequently is special equipment used? Who uses it?

What combinations of materials are used most frequently?

Is the supply of materials adequate for expected needs?

Are staff assignments appropriate for accomplishing center functions?

How well is the center advertised to students? To the community?

What observable impact have center programs had on students?

What impact have programs had on faculty?

What is business-industry-community response to the center?

What cooperative programs within and outside the school have resulted from the center's activities?

To what extent do faculty and the community in general support the career resource center?

These questions examine center influence on students, faculty, business and industry, parents, and the community at large and provide a basis for generating the feedback necessary for improvement.

Evaluation normally focuses on three areas of concern: use of the facility and its materials, the materials and equipment themselves, and center impact on target populations. One or two relatively simple forms or procedures suffice for the first two areas; extracting impact data requires more complex processes.

Evaluating the Use of Facilities and Materials

Gathering data on the frequency with which the career resource center and its materials and equipment are used is the least demanding evaluation task. A sign-in log is the most expedient tool for estimating the use of the facility. An alternate monitor is a folder for each pupil, recording his or her career planning activities including use of the center.

Materials should be signed out routinely as in any typical library situation and the sign-outs tabulated weekly. Where special equipment or systems are employed, it is essential that use of these devices be properly accounted for. Use of pamphlets and other loose or unbound materials can be estimated by utilizing a random sample of students in the center at a given time. A very brief list of materials with space for students to check which they have used, and how often, can be handed out and collected several times each week. Although not a precise measure, when combined with facts extracted from the total student body later through more extensive questionnaire methods, this random information provides a point for comparison and verification of primary assessment data. Whenever possible, forms should be designed to permit mechanical tabulation.

Evaluation of Materials and Equipment

From time to time, decisions must be made regarding renewal of subscriptions, replacement of lost or worn out materials, or continuation of expensive packaged programs. Systematic evaluation of materials and equipment in counseling or classroom settings renders this decision-making easier and helps also in making judgments about more appropriate purchases. Are the materials in the center doing the job they were intended to do? Are people using materials as they were designed to be used? Are the materials appropriate for the populations using them? What about reading level? Accuracy? Relevancy? Can students use the equipment effectively?

It is often difficult to determine how well materials meet student needs. The frequency with which an item is used is helpful information; the popularity of a filmstrip or cassette is a good indicator of whether or not the item is hitting its mark. A single brief form to be completed by students and teachers provides valuable interim data to support the frequency of use statistic. Several short questions to staff and students elicit information on new material or equipment. In all cases, questions should pertain directly to the item being researched.

The annual or bi-annual survey of all students, teachers, and others who have visited the center should include questions regarding use of specific materials or equipment. An interesting follow-up to this survey is interviewing a random sample of users, encouraging frank and honest responses. Recommendations for change should be acknowledged and acted on to whatever extent possible. This technique emphasizes the fact that the staff is committed, in a very personal way, to the constant improvement of the center.

Impact Evaluation

The most crucial evaluation information of all compares the actual outcomes of the center with the expected outcomes determined by the planners. This evaluation draws on the base-line data collected before the center opens. To be effective, impact evaluation must be designed at the outset of the center's development.

Pre-center base-line data originally gathered for planning and justification purposes now serve as pretest data in a pre- posttest research design. This design is a method of determining gains in knowledge or skill and the relative value of different instructional strategies or materials. Development of decision-making skills, increase in knowledge about occupations, increase in positive self-concept, and changes in vocational maturity are examples of career development concerns which can be measured. Several home-constructed and commercial assessment instruments may be used separately or, for economy of time, in combined forms.

Routine follow-up studies conducted by placement or work-study specialists provide further valuable feedback. If such specialists are not part of the school district staff, the director should initiate the gathering of follow-up data. Regardless of who is responsible for the collection of this information, preparing students to complete surveys before leaving school stimulates response. The follow-up procedure and need for data collection should be presented to students as an integral part of center activities.

Summary

The evaluation component of planning and operating a career resource center is vital. Because the day-to-day demands of keeping a center functioning tend to crowd out evaluation, it is imperative that objectives and goals be set up and an evaluation designed before the center opens its doors. These efforts provide the information that keeps the center in the mainstream of career development activities. Examples of questionnaires and forms for conducting the evaluation of a center are included in Appendix B.

> The career resource center arrives on the American education scene at a time when diverse economic forces are affecting the lives of almost every citizen. Proliferation of these centers in schools throughout the country is a response to two divergent but related developments in education: (1) the emergence of career education and (2) the simultaneous increase in multi-media teaching techniques. Each of these developments is a product of the last twenty years' burgeoning technology. One is a response to the problems created by that technology, the other an attempt to capitalize on its promise.

Chapter X

Into the Future

Imbedded in the concerns that brought forth career education are problems accompanying the growth of school guidance over the years: how to effectively communicate information to students; how to choose information; who to make responsible for delivering information; how to direct the career development of children; and where, when, and how best to accomplish goals. Technology presents the additional problem of insuring that gadgets, gimmicks, and machines not be offered in lieu of useful programs. Walz (1970) observes that guidance counselors have at their disposal all that technology has to offer and that it is within their power to use these resources to great advantage.

Career education has placed career development at the center of guidance activities and the career resource center at the forefront of career development. Is the career center the alpha and omega of the guidance program? Obviously not. The resource center is a response to current educational concern for the "vocationalization" of all young people, but it is only one of numerous devices that must be employed to help realize our national ambitions. When resource centers and career planning programs are instituted in tandem, a perspective will prevail and change will occur. The economic realities of our day place new stress on how guidance manifests itself in the schools of the nation. If the resource center is considered a valuable adjunct to the career guidance program, how will it change and evolve in the years to come?

Technology on the Move

In the 1970 "Technology in Guidance" issue of the *American Personnel and Guidance Journal*, Loughary says the computer is here to stay, supporting this prophetic statement with evidence gleaned primarily from several experimental computer programs. Subsequent projects have generally confirmed the machine's potential. Recent assessments of the state of this technology, however, seem to indicate that the educational computer movement is treading water--the technological promise is still there, but the means of implementing it are not. Money and equipment are the major drawbacks, but other concerns are evident as well.

The Right to Know Amendment to the 1974 Elementary and Secondary Education Act indicates a problem area with important ramifications for the eventual development and utilization of a fully interactive computer-assisted guidance system. There is deep public fear of the machine and its capacity to store highly personal information. True, the programmed computer can quickly retrieve, revise, and update the contents of its information banks. But a fair proportion of the community will resist placing information about themselves and their children into the computer until they receive strong assurances that the information will remain confidential. Specialists in guidance must appreciate this readiness factor, for it stems from a deeper concern over the dehumanizing quality of our technologically oriented society.

Other media forms--particularly television, telecommunications, and audio tape--have grown in their capacity to serve. Despite financial woes, educational television has made important strides; the development of local and state networks and national consortia can only have extremely positive results. Impending changes in Federal Communications Commission regulation of cable television will unquestionably have important consequences for the extension of television use in both schools and homes (Simpson and Sutherland, 1974).

The telecommunications industry is making important advances--further application of computer assisted instruction in the home (Jerman et al., 1972) and group instruction using telephone "telelectures" and an electronic blackboard (Rookey et al., 1971). Fleischer (1971) says audio-tape is not yet fully exploited; loop transmission, centralized systems, dial access retrieval, random access, and combination systems are potential uses of this medium.

Each of these forms of applied technology has implications for use in a variety of settings including home, school, industry, and community.

Today's career resource center is a pioneering attempt to develop a combination system based on a wide variety of traditionally-oriented media. Loughary (1966) points out the tendency in teaching to use just one source, such as a textbook, and posits that in a man-machine system it can be as convenient to use multi-source materials as to use a single reference book. This is possible only when all materials are organized for efficient retrieval and both teachers and pupils use a systems approach to knowledge acquisition (i.e., when the basis goals of a career resource center are realized).

Into Extinction?

The career resource center is a tool for helping people cope with a new post-technological world. Centers are in an early stage of development, a transitional stage before super-sophisticated tomorrow. A blend of traditional paper and soft copy modes of communication and nascent innovations, the career resource center of the next decade will remain experimental as a real student service. It will be the place where guidance, curriculum, and media specialists will combine creative efforts to develop and systematize the delivery of guidance services beyond our present understanding. At the same time, the center will offer a place for active learning for all who explore it. The glimmerings of this potential are already evident.

Cooperative efforts among education, labor, and other segments of the community are a necessary step toward improving the flow of occupational and career information. Regional and statewide information networks developed by state departments of education will gradually link school districts by computer and other means, and the career resource center will certainly benefit from this advance. Career education is already bringing the school, home, and community closer together.

What does the future really hold? Long range predictions are pipedreams at best, but the near future may be more scrutable. Trends toward adult and community learning centers, storefront counseling, open education, and industry interest in the career development of employees suggest that greater demands will be made on school-based resource centers. Resource center projects that stimulate evening community use are becoming more common. With the energy crunch, expediency may require taking the contents of the career resource center to other locations; counseling resources may grow more mobile.

In time, the regional or state curriculum and information centers may conceivably eliminate local resource centers. Advances in electronics miniaturization and computer technology all but guarantee that the home will ultimately be every person's educational center. Meanwhile, educators are exploring, creating and sharing the programs that will become the ultimate guidance system.

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Appendix A: Equipment and Materials

EQUIPMENT

Unit	Vender and Description	Total Cost
2	DuKane Automatic Sound Filmstrip projector Cassette 28A11A @ $275.00 each	$ 550.00
3	Super Scope C 101 Cassette Recorder @ $43.50 each	130.50
1	Murdock Listening Center LC-MAD-IV @ $30.00 each	30.00
1	Murdock MAD1-1 Audio Deck (9 Headsets) @ $90.00 each	90.00
2	Kodak Ektalite 120 Readers @ $100.00 each	200.00
2	Bulletin Boards @ $25.00 each	50.00
2	File Cabinents @ $75.00 each	150.00
2	Units of Shelving @ $51.00 each	102.00
1	Pamphlet Rack @ $100.00 each	100.00
2	Porto-Carroll 660 Model @ $80.00 each	160.00
1	50 x 50 Dalite Video A Lenticular Screen @ $62.00 each	62.00
1	Bennent File Plan @ $20.00 each	20.00
1	Lighted Viewer @ $120.00 each	120.00
	EQUIPMENT TOTAL	$1,764.50

MATERIALS

Unit	Vendor and Description	Total Cost
	Cassette and Film Strip Sets	
	Guidance Associates Pleasantville, New York 10570	
1	High School Course Selection and Your Career @ $42.00 each...	$ 42.00
1	Choosing Your Career @ $42.00 each	42.00
1	I Wish I'd Known That Before I Went to College @ $42.00 each.	42.00
1	A Job That Goes Some Place @ $42.00 each	42.00
1	Linking Your Job and Your Life @ $42.00 each	42.00

Appendix A: (continued)

Unit	Vendor and Description	
1	Trouble at Work @ $42.00 each	$ 42.00
1	On the Job: Four Trainees @ $42.00 each	42.00
1	Your Future Through Vocational Education @ $42.00 each	42.00
1	You and Your College Entrance Exam @ $42.00 each	42.00
1	An Overview of Technical Education @ $42.00 each	42.00
1	Preparing for the Jobs of the 70's @ $42.00 each	42.00
1	What you Should Know Before You Go To Work @ $42.00 each	42.00
1	Your Job Interview @ $42.00 each	42.00
1	Job Hunting: Where to Begin @ $42.00 each	42.00
	McGraw-Hill Book Company 330 W. 42nd Street New York, N.Y. 10017	
1	Agriculture and Industry @ $57.50 each	57.50
1	Children's World Series @ $32.50 each	32.50
1	Community Helpers Set I @ $41.00 each	41.00
1	Community Helpers Set II @ $41.00 each	41.00
1	Types of Cities @ $57.50 each	57.50
1	Systems In Our City @ $49.50 each	49.50
1	Family Living Set II @ $57.50 each	57.50
1	Family Living Set III-@ $57.50 each	57.50
1	School Series @ $57.50 each	57.50
1	World of Work Set I & II @ $110.00 each	110.00
1	World of Work Set III @ $110.00 each	110.00
	Educational Sensory Programming Route 1, Box 418A Jonesboro, Ak 72401	
1	Case 1 @ $105.84 each	105.84

Appendix A: (continued)

Unit	Vendor and Description	Total Cost
1	Set of 6 Cassettes @ $29.40 each set	$ 29.40
1	Case 2, 3, 4 and 5 @ $436.59	436.59
	Science Research Associates, Inc. 259 E. Erie St. Chicago, Il 60611	
1	Occupational Exploration Kit @ $107.00 each	107.00
1	Widening Occupational Roles @ $170.00 each	170.00
2	Job Experience Kit @ $130.00 each	260.00
1	Focus on Self-Development @ $212.00 each	212.00
	Harcourt Brace & Jovanovitch 757 Third Ave. New York, N.Y. 10017	
1	Psychology Today Game (Set of 10) @ $50.00 each	50.00
	Careers, Incorporated Box 135 Largo, Fl 33540	
1	Desk Top Career Kit (J.H.S.) @ $114.50 each	114.50
	Finney Company Minneapolis, MN 55401	
1	Occupational Guidance Series (5 Units) Plus Rack @ $320.00 each	320.00
	Superintendent of Documents U.S. Government Printing Office Washington, DC 20402	
2	Occupational Outlook Handbook @ $5.00 each	10.00
1	Dictionary of Occupational Titles (DOT) - 3 Volumes @ 10.00 each	30.00
	J.G. Ferguson Publishing Co. 6 N. Michigan Ave. Chicago, Il 60602	
1	Encyclopedia of Careers @ $10.00 each	10.00
2	Career Opportunities @ $12.00 each	24.00

Appendix A: (continued)

Unit	Vendor and Description	Total Cost
	CCM Information Corporation 909 Third Ave. New York, N.Y. 10022	
1	College Bluebook @ $90.00 each..............................	90.00
	Chronicle Publishing Company Moravia, N.Y. 13118	
1	College View Deck @ $85.00 each.............................	85.00
1	Occupational View Deck @ $85.00.............................	85.00
	Universal Publishing Company Moravia, N.Y. 13118	
1	Vocational Guidance Manual Set @ $107.00 each...............	107.00
	Guidance Associates Pleasantville, N.Y. 10570	
1	Careers in Depth Series (45 books) @ $145.00 each............	145.00
	Educational Testing Services Princeton, N.J. 08540	
30	Deciding Booklets @ $2.00 each..............................	60.00
	MATERIALS TOTAL	$3,710.83

Appendix B: CRC Evaluation Instruments

Example A - Career Resource Center Questionnaire

Grade___

1. Have you visited the career resource center? Yes___ No___

2. My knowledge about the world of work has increased as a result of my visits to the career resource center. Yes___ No___

3. As a result of visiting the career resource center, have you become more interested in seeking specific or general career information?
Yes___ No___

4. After exploring your interests in one field, were you curious about other fields? Yes___ No___

5. Did you find information easy to locate in the career resource center?
Needed help___ Needed some help___ Needed no help___

6. Using a check mark in the appropriate column, please rate the equipment and resources in the career resource center as they met your personal needs.

	Good	Fair	Poor	Does Not Apply
Career reference books	___	___	___	___
Occupational files	___	___	___	___
College catalogs	___	___	___	___
Technical school information	___	___	___	___
Career game	___	___	___	___
College view deck	___	___	___	___
Interest inventories	___	___	___	___
Hall Occupational Orientation Inventory	___	___	___	___
Reader-printer	___	___	___	___
Interview cassettes	___	___	___	___
Filmstrips	___	___	___	___
Career center personnel	___	___	___	___

7. Please check your reason or reasons for visiting the career resource center:

Counselor's suggestion___
Teacher's suggestion ___
Parent's suggestion ___
Friend's suggestion ___
My own choice ___
Had to ___

8. I spoke with my counselor about the information I used in the center.
Yes___ No___

Appendix B: (continued)

9. The career resource center has been helpful to me. Yes___ No___
If you haven't visited the career resource center, why?

10. The information I used in the career resource center was helpful to me in making a decision in which of the following areas?

Course selection ____
College plans ____
Vocational plans ____
Technical/business school plans ____
Other
Please indicate:

11. Please check any/all activities of the career resource center that have been meaningful to you. If you did not participate in some of these activities, please write NA.

Weekly career consultants ____
Career weeks related to the departments ____
Publication-getting it together ____
Civics career unit ____
Business dynamics career unit ____
Career center and classroom films ____
Group use of the center ____

12. Please suggest any activities that would make the career center more meaningful to you.

Appendix B: (continued)

Example B - Career Resource Center Evaluation

1973-74

1. Grade____ Sex____

2. Have you visited the career resource center? Yes____ No____

3. After exploring your interests in one field were you curious about other fields? Yes____ No____

4. Did you need help in using and locating the materials? Yes____ No____

5. Check the types of materials you have used:

_____Occupational files
_____College and technical school catalogues
_____Job experience kits
_____Cassettes
_____Cassettes and filmstrips (AV-Matics)
_____Micro-Scan (Pennscript)

6. Career center has been helpful to me. Yes____ No____

7. If you haven't visited the center, why?________________________________

8. Were you able to find materials about the occupations in which you were interested? Yes____ No____ If no, which ones______________________
____

9. Do you have any suggestions or comments for improving the career resource center? (1) get more films and cassettes, (2) bigger room, (3) more job experience kits, (4) should be one period a week on schedule, (5) have room open in morning before homeroom period, (6) have more AV-Matics.

Appendix B: (continued)

Example C - Student Evaluation
Career Resource Center

1. Have you used the career resource center? Yes____ No____
If Yes, how many times?_____

2. Did you find the materials accessible and organized? Yes____ No____ Sometimes___

3. Did you find the equipment in good working condition? Yes____ No____ Sometimes___

4. Did you find the materials up-to-date? Yes____ No____ Sometimes___

5. Did you find the information you needed? Yes____ No____ Sometimes___
If No, was there an attempt made to obtain the information? Yes____ No____ Sometimes___

6. In assisting you to make a future career decision, which helped you most? (Place a 1 after the item which helped most, a 2 after the next best, then a 3 after the next and so on.)

_____Career books
_____Career pamphlets (materials other than books)
_____Cassette tapes
_____Pennscripts
_____View decks
_____Career kits
_____Filmstrips

7. Do you feel that WVW has assisted you in your search and planning for a future career? Yes____ No____

8. How sufficient was the help you received in searching and planning for a future career? Adequate____ Should have had more____

9. How helpful was the meeting with the counselors in the career resource center in helping you to understand what the career resource center can do for you?

_____I have a very good understanding of what the career resource center can do for me.
_____I am not too sure what the career resource center can do for me.
_____I have no idea what the career resource center is about.

10. How useful would a career resource center be to you during the years you' are in high school?

_____Very useful.
_____I will probably use it but could get along without it.
_____I will have no use for it.

Appendix B: (continued)

11. How could the service offered by the career resource center be improved? What could we do to help you with career planning that we are not presently doing? Can you suggest anything that would make our career resource center more valuable to students?

____
____
____

Example D - Evaluation of Films and Filmstrips

1. Name careers (job areas) identified in the film.
2. Does the film discuss how to enter careers? Give processes: e.g. first work at certain jobs for two years, then apply for training at a school, then get the license, etc.
3. Describe characteristics of individuals who would be able to understand content of film?
4. Was terminology new to you? Write terms you did not know.
5. At what training or class levels would the film be used?
6. Did you learn anything new? What?
7. What written or visual materials should be used to supplement content of film?

Appendix B: (continued)

Example E - Career Resource Center Teacher Evaluation

1. Did you utilize the CRC's facilities?

   Yes____ No____ Sometimes____

2. Did you encourage any of your students to visit the CRC?

   Yes____ No____ Sometimes____

3. Do you feel career education is important in curriculum?

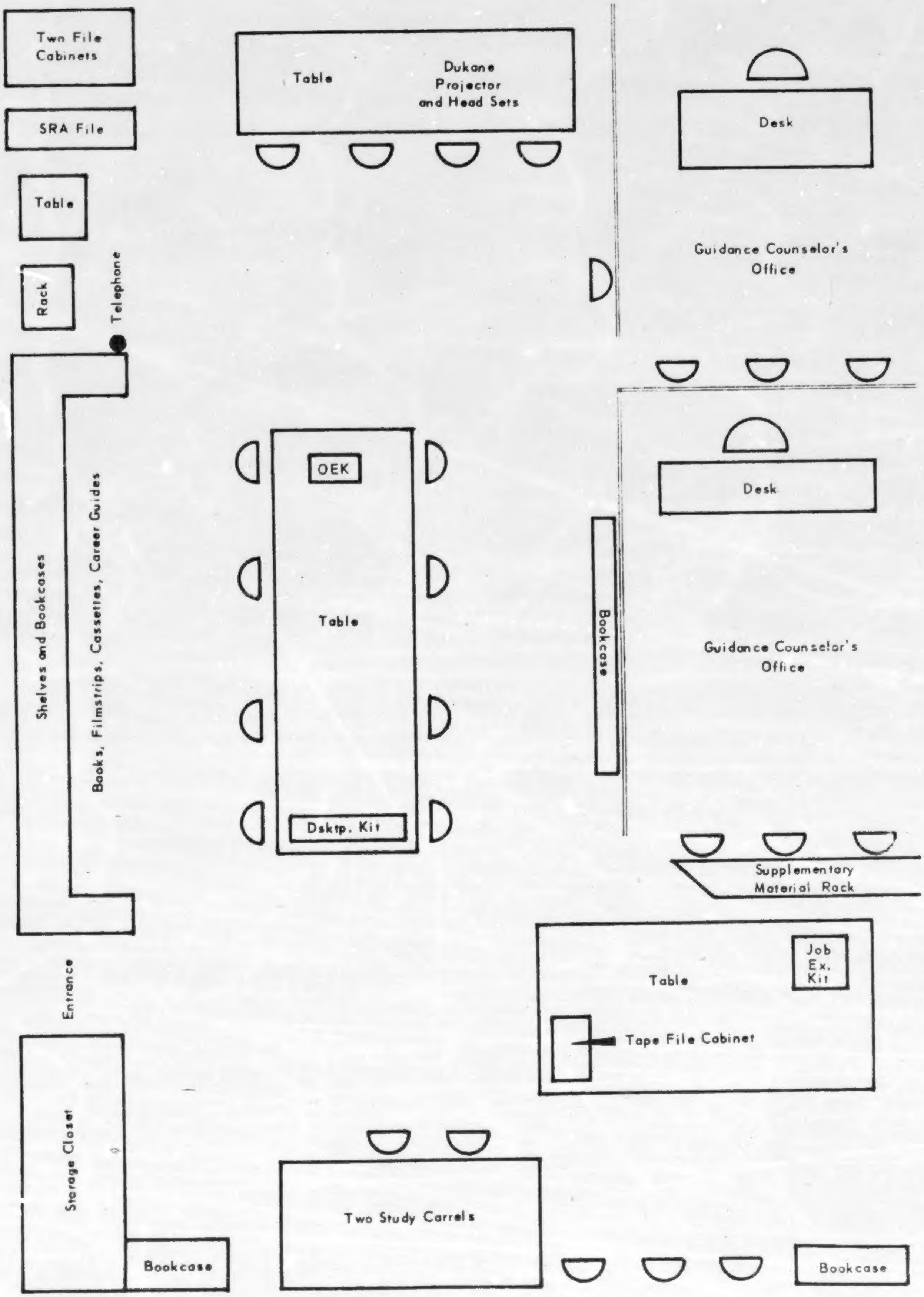
   Yes____ No____ Sometimes____

4. Are you willing to participate in the CRC's activities?

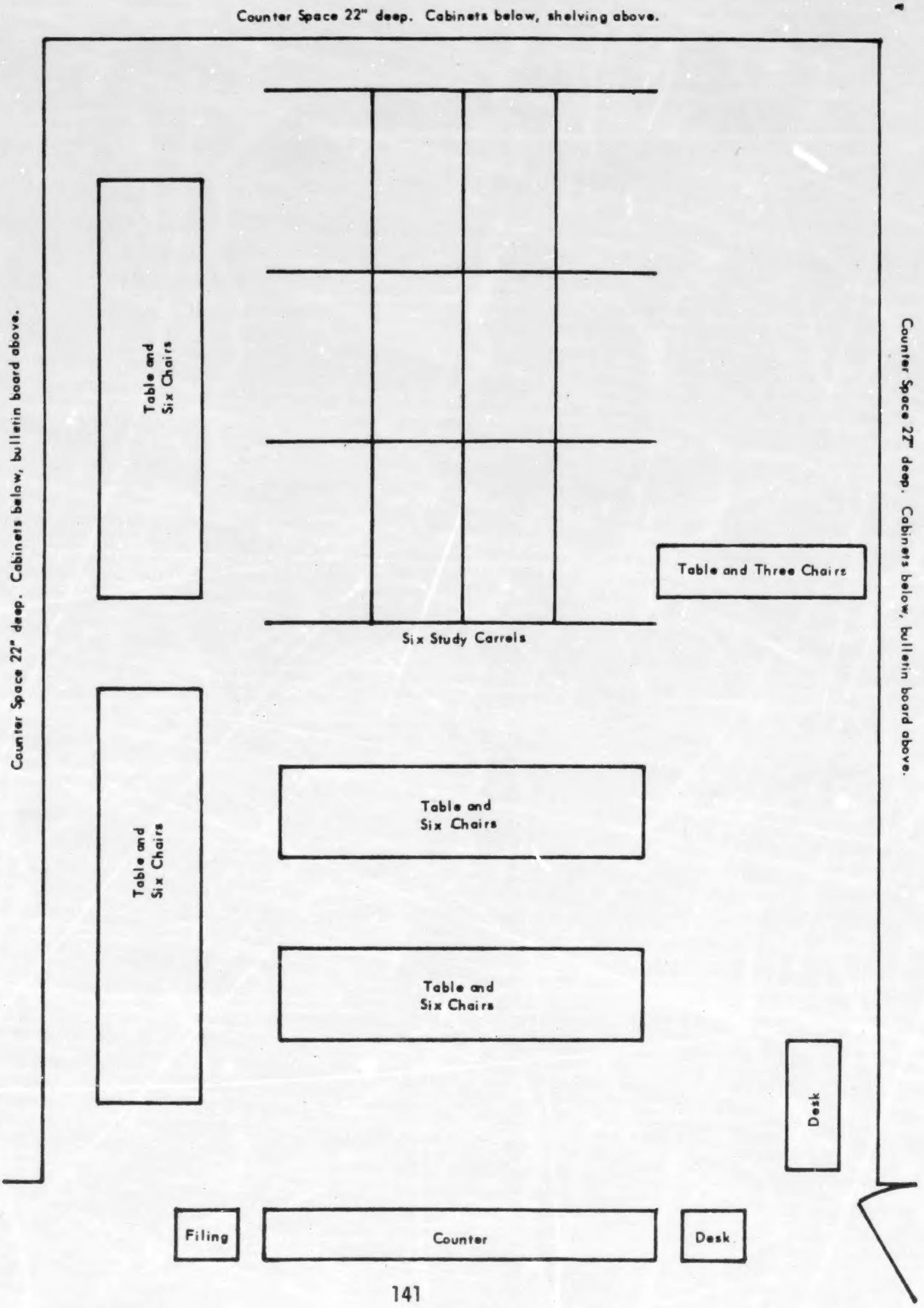
   Yes____ No____ Sometimes____

5. Are there any particular careers you would like more information on? (Please list.)

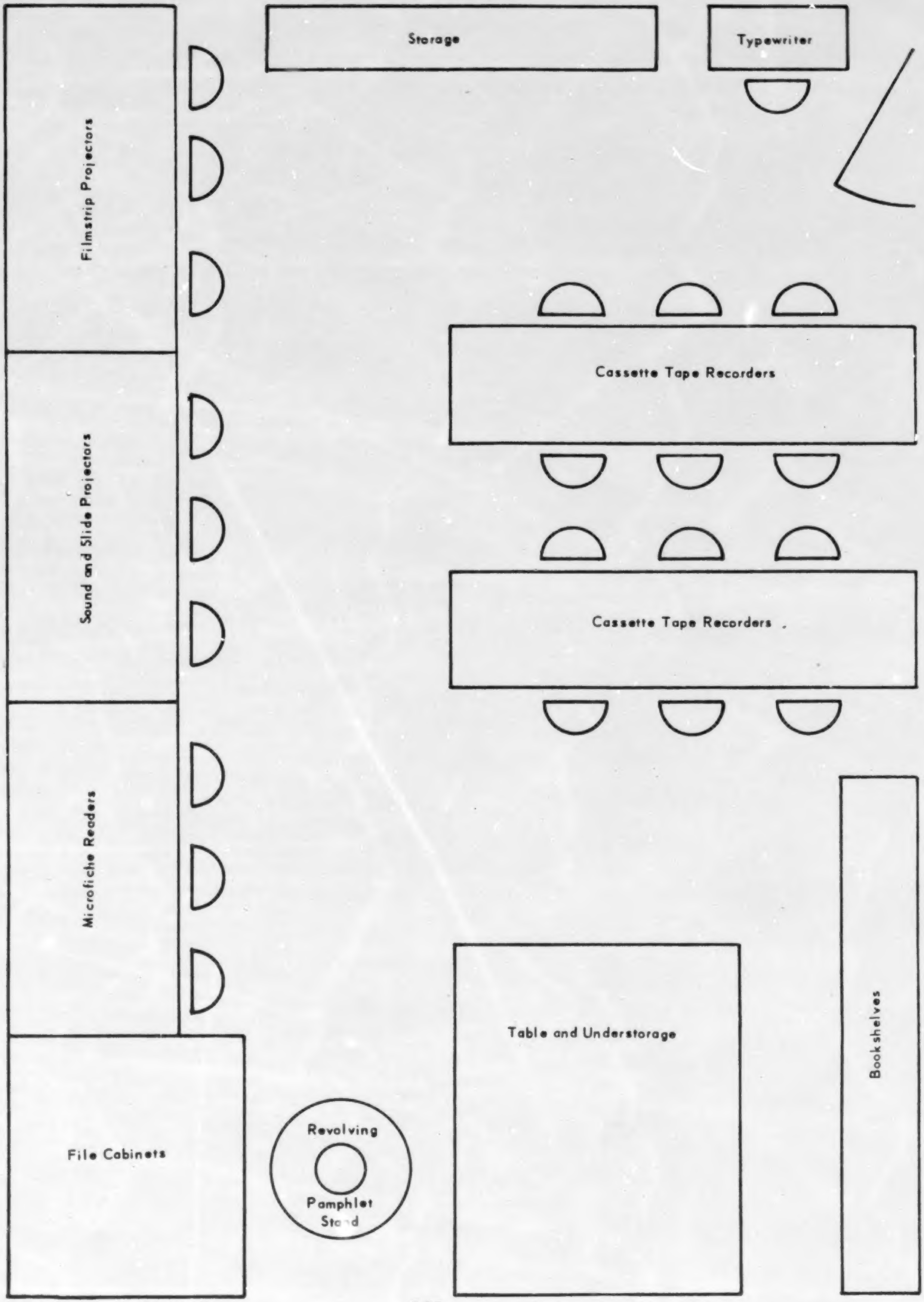
Appendix C: Career Resource Center Floor Plan


Two File Cabinets
SRA File
Table
Rack
Telephone
Table
Dukane Projector and Head Sets
Desk
Guidance Counselor's Office
Shelves and Bookcases
Books, Filmstrips, Cassettes, Career Guides
OEK
Table
Dsktp. Kit
Bookcase
Desk
Guidance Counselor's Office
Supplementary Material Rack
Table
Job Ex. Kit
Tape File Cabinet
Entrance
Storage Closet
Bookcase
Two Study Carrels
Bookcase

Appendix C: (continued)


Counter Space 22" deep. Cabinets below, shelving above.
Counter Space 22" deep. Cabinets below, bulletin board above.
Counter Space 22" deep. Cabinets below, bulletin board above.
Table and Six Chairs
Six Study Carrels
Table and Three Chairs
Table and Six Chairs
Table and Six Chairs
Table and Six Chairs
Desk
Filing
Counter
Desk

Appendix C: (continued)


Storage
Typewriter
Filmstrip Projectors
Cassette Tape Recorders
Sound and Slide Projectors
Cassette Tape Recorders
Microfiche Readers
Bookshelves
Table and Understorage
File Cabinets
Revolving
Pamphlet
Stand